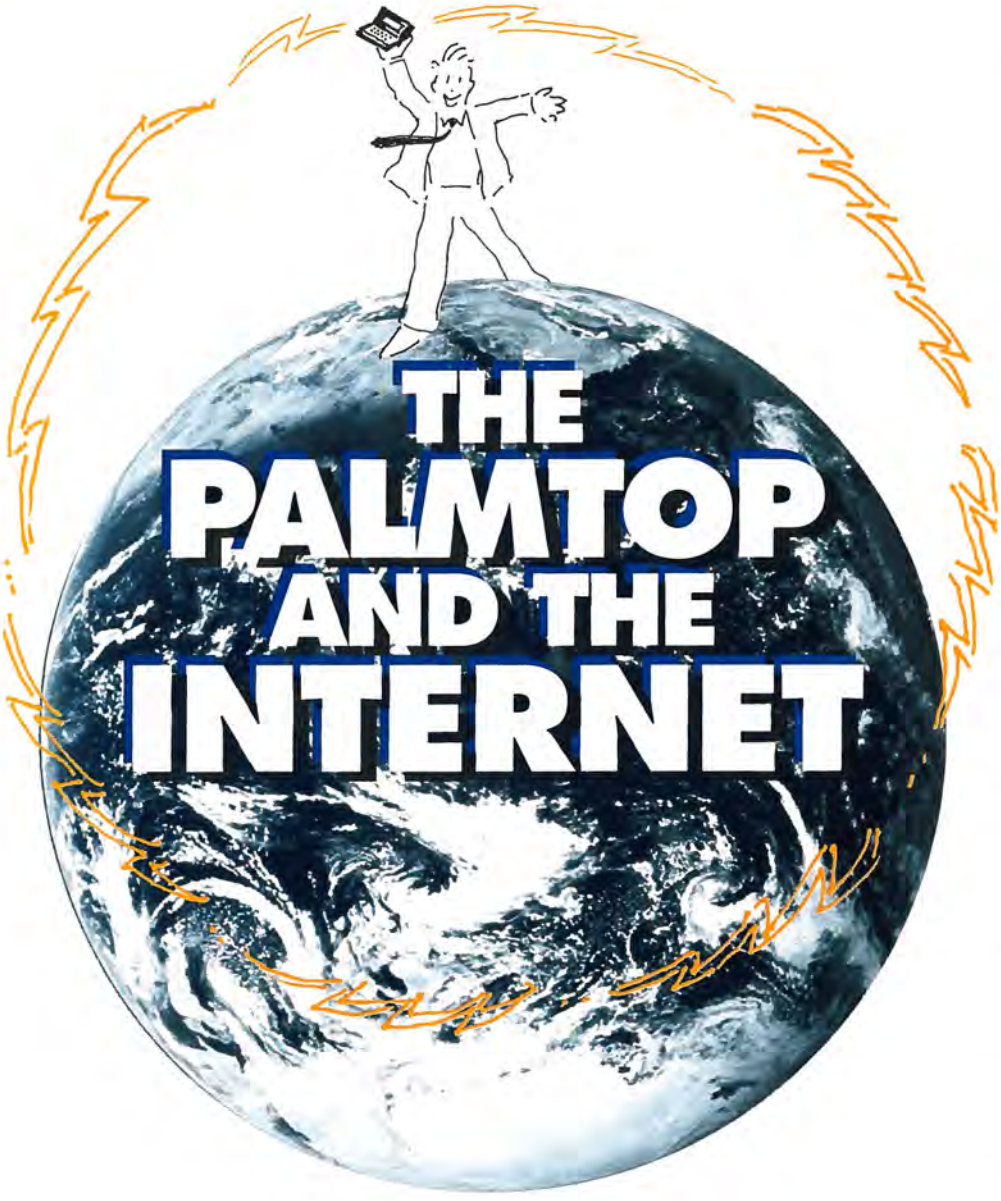
An Independent Publication for **Users of HP Palmtop Computers**

U.S. $7.95

Volume 5, Number 3, 1996

THE HP Palmtop Paper



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Publisher's Message

Hal Goldstein

The question we're most frequently asked is, "How can I access the Internet using the HP Palmtop?" Do we have an answer for you! The short answer is use a shareware program called Net-Tamer. The long answer is our ten-page cover story.

Jesper Siig, an *HP Palmtop Paper* reader in Copenhagen who works as an Internet Consultant for Digital Equipment Corporation, volunteered to write the story. His task was to provide a complete, comprehensive answer to the Palmtop and the Net question. As *HP Palmtop Paper* editors Richard Hall and Tom Gibson found out, providing an answer in a readable and useful format was not simple.

"Surfing the net" has evolved in the past several years. Users with Windows' machines can use Netscape or a similar browser. Setup, although not painless, is not difficult and there are many knowledgeable people who can help. Unfortunately, you really have to understand more of what is going on in the background to start browsing and using other Internet services with the Palmtop.

The Palmtop and the Net article is organized around five common Net functions: E-mail, browse, participate in discussion groups (newsgroups), download files (FTP), and log on to other computers (Telnet). If you study the article, not only will you learn about palmtop tools, you will gain a better understanding of what the Internet is and its benefits.

In keeping with the theme of the issue Mark Scardina has completely revised and updated an article about CompuServe that ran several years ago. Using a CompuServe thread, Linda Worthington contributed an article and poem. Linda chronicles the most unusual places users have used their Palmtop from the bathtub to the mountaintop.

Spreadsheet users will appreciate Carl Merkle's advanced discussion of 1-2-3 database techniques. Victor Roberts describes how to increase the chances of recovery of a lost Palmtop. Finally, in my User to User column you are encouraged to meet key HP people, fellow HP Palmtop users, *HP Palmtop Paper* advertisers, and me, and attend the August Anaheim, California HP Handheld conference. I also mention our new book, *PC in your Pocket*, edited by Ed Keefe. The book overviews the HP Palmtop drawing from the best of past pages of *The HP Palmtop Paper*. It is intended for both Palmtop users and for your interested friends and colleagues.

Hal Goldstein

The HP Palmtop Paper

INCREASING YOUR PERSONAL POWER BY EXPANDING YOUR PALMTOP'S POTENTIAL

Volume five / Issue three
May/June 1996

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The HP Palmtop Paper (ISSN 10656189) is published by Thaddeus Computing Inc., at 57 East Broadway Avenue, Fairfield, IA 52556. Periodical postage paid at Fairfield, Iowa. Subscription rates payable in U.S. dollars, checks drawn on a U.S. bank, or by credit card — one year: $39; two years: $69. Postage: U.S. and U.S. possessions free; Canada, Mexico add $6 per year; other countries add $18 per year. Published bi-monthly plus two bonus issues, one in April and one in November. Please allow four to six weeks for receipt of first issue. Executive, Editorial, Circulation, Marketing and Advertising Offices: P.O. Box 869, Fairfield, IA 52556. Telephone: (515) 472-6330, FAX: (515) 472-1879.

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POSTMASTER: Please send any address changes to The HP Palmtop Paper, Attn: Thaddeus Computing, Inc., P.O. Box 869, Fairfield, IA 52556.

Palmtop Wisdom

Personal Effectiveness Using the HP Palmtop

By Carol de Giere.

HUMAN RELATIONS

Reminder system helps care for special people

> *"...If I can ease one life the aching*
> *or cool one pain,*
> *or help one lonely person*
> *into happiness again,*
> *I shall not live in vain."*
>
> Emily Dickenson

Can a computer increase someone's compassion? What does a machine know of anyone else's concerns? Well, as a Palmtop computer user, you can find ways to expand your caring time. Around Thaddeus Computing, Publisher Hal Goldstein uses his Appointment Book to schedule father-son activities on the weekends. Associate Editor Paul Merrill sets an appointment reminder to call his 93-year-old grandmother every two weeks. He says in pre-pocket-computer days, he often let this slip, even though he knew it meant a lot to her. Managing Editor Rich Hall has anniversaries and family birthdays set up as yearly repeating appointments one week in advance of the actual date, so he has time to buy gifts.

ON THE HP PALMTOP

The Appointment Book use is obvious — set an appointment to remind you of a special person or event. All appointments are important, but some are more vital. Your child could have a bad case of congestion and you can set a wake-up alarm to go off periodically so you can easily check on the child's breathing during the night. You might double or triple enter really important appointments so the alarm goes off more than once. Like the birthday example above, you could put a reminder appointment days or weeks in advance to let you prepare for that special event.

You can keep information about the special person in the Notes field of your PhoneBook. The kind of flowers she likes, the toys he's been asking about, favorite music or food, things like that. You can note down promises you made to the person in the past and review them before you call.

If out-of-sight out-of-mind is your tendency, use your reminder system to prompt you to call friends and relatives. Or schedule an hour or more a week for community volunteer work. Your computer will happily help you invest your attention on caring for your fellows.

TIME MANAGEMENT

Prepare for disasters with your HP Palmtop

If imagining potential disasters makes you squirm, then use your Palmtop to be prepared. In case of fire, flood or worse, keep vital data with you in your Palmtop. And make sure you bring your Palmtop with you as you escape.

Medications, blood types, allergies, and other health information can be kept in the Notes field of your PhoneBook entry. If you have dependents, you should have PhoneBook entries for each family member, with important information in Notes. You can keep police, fire department, and other emergency agencies in your PhoneBook, along with phone numbers, fax numbers, and e-mail addresses. Fax numbers and e-mail addresses are particularly important as wireless communications becomes more widely available.

Say, for example, that you are a Palmtop user with the RadioMail Wireless Messaging service, or an OmniGo 700LX user. If your car breaks down in the middle of nowhere, or if you have a medical emergency while camping, you might be able to e-mail or fax a request for help to the appropriate organization. But this would only be possible if you have the necessary information with you on your Palmtop.

If you travel to a new part of the world, get the emergency numbers in advance, and keep them with you in your Palmtop. If you or a member of your family has a medical condition, keep the generic and specific names of medicines with you in PhoneBook, along with the name and phone number of a physician familiar with your case.

Some things seem very important at the time, but are not really emergencies. Dinner time is considered an "emergency" situation by some people. Did you know that some restaurants now have fax numbers? You can save time by faxing in your order from a Palmtop and picking it up hot, and ready to go.

Ease into each season with helpful ToDo lists

Each major weather transition signals dozens of changes you need to make. You need to check out the lawn mower in the Spring and change your auto's antifreeze in the Winter. A seasonal ToDo list can help you stay prepared. Below are some sample lists.

SEASONAL TODO LIST PREPARES YOU FOR SPRING/SUMMER

Home: Wash and store storm windows. Inspect screens and install.

Home: Furnace: turn pilot light off
Home: Unplug heat tape on pipes.
Home: Plan structural and cosmetic improvement projects such as painting, adding a deck. Order supplies.
Clothing and Linens: Clean and store winter clothes and blankets. Bring summer clothes out of storage. Send woolens to the cleaners. Do a thorough spring cleaning.
Car: Change the oil. Check service schedule.
Bikes: Pump up tires and oil chains.
Lawn and Garden: Buy gas and oil. Clean outdoor grill. Order garden plants.
Other: Renew fishing license. Donate unused items to charitable resale shop.

TODO LIST FOR FALL/WINTER

Home: Remove screens. Clean and install storm windows. Add heavier drapery if desired. Seal cracks.
Home: Turn furnace pilot light on. Have furnace cleaned and checked. Clean vents.
Home: Order wood and collect kindling for fireplace or wood burning stove.
Home: Plug in power for heat tape on pipes.
*Car:*Change oil. Store safety clothes and blankets in car. Check service schedule. Check antifreeze.
Lawn and Garden: Run lawn mower dry and drain any remaining gas or oil. Cover roses. Turn off water to outside faucets or cover faucets. Bring power equipment to basement. Store batteries properly. Order trees for fall planting.
Other: Check out snow blower or other equipment. Check service schedule on equipment. Clean floors, carpets, gutters. Check roof and masonry.

ON THE HP PALMTOP

There are a number of ways to organize this information on the HP Palmtop.

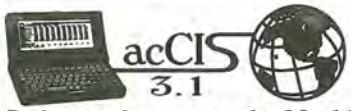
❑ You could keep the list as a Memo file or an entry in your NoteTaker file and set a repeating appointment to remind you to check the list on a certain date each year.

❑ You could take the individual items on the list and schedule them as appointments, events, or ToDos on specific dates.

❑ You could set a repeating appointment for a specific date each year, and keep the ToDo list in that appointment's F3 Note field.

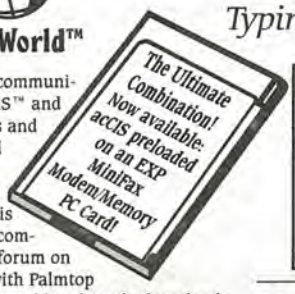
You'll have to pick the method that is best for you, or make up one of your own. Below are suggestions for items you can include on your season ToDo list.

It may take several weeks to complete your tasks, so let your Palmtop be a tool for renewal-for keeping up with nature and the needs of the times.



Your Palmtop Access to the World™

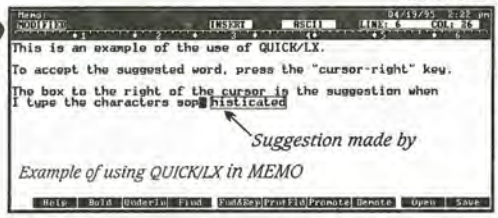
Now you can have the world of electronic communications in the palm of your hand with acCIS™ and CompuServe®. acCIS automatically uploads and downloads messages quickly. You can read and write messages off line, saving on connect charges and phone bills. acCIS is the only CompuServe access program that is designed specifically for your HP Palmtop computer. By using acCIS to join the HPHAND forum on CompuServe you can correspond directly with Palmtop experts and programmers from around the world and easily download software directly to your Palmtop. In addition to the Palmtop version, you get a copy of acCIS for your desktop or laptop PC at no extra cost.



QUICK/LX™

Typing aid for the HP Palmtop

QUICK/LX learns the words you type most often, then suggests them after you type just a few characters. The suggestions are displayed in a box on the screen. You can ignore the suggestion and keep on typing, or accept it with the press of a single key, and QUICK/LX will finish the word. QUICK/LX can also be used to correct your most common typos! QUICK/LX works in programs under the System Manager and in text-mode DOS applications. QUICK/LX can even be used to enter Macros that work in both the System Manager and DOS (unlike the built-in System Macros.) QUICK/LX also comes with a DOS version for your desktop computer.


This is an example of the use of QUICK/LX.
To accept the suggested word, press the "cursor-right" key.
The box to the right of the cursor is the suggestion when I type the characters sop
histicated
Suggestion made by
Example of using QUICK/LX in MEMO

QUICK/LX: $39

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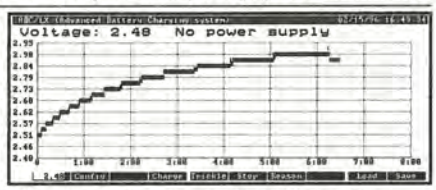

ABC/LX adds intelligence to battery charging in the HP Palmtop, plus it provides excellent information about battery conditions and charging. With ABC/LX you can simply forget about your batteries!

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Custom cables to connect your HP Palmtop Computer to a wide variety of serial peripherals. Examples include: Pocket modems, serial printers (including the Citizen PN60 and Pentax PocketJet.) Prices start at $35 - call for details.

Letters

Electronic Reference Texts from the UK Aid Palmtop Users

I'm a translator, HP Palmtop user and *HP Palmtop Paper* subscriber and I thought that other Palmtop users might be interested in some commercial dictionaries. I strongly recommend them to anyone in the market for a good Palmtop dictionary. Support is also very good.

Here is detailed information on Harper Collins dictionaries for use on the HP 100/200LX.

1. The Collins Dictionary/ Thesaurus provides 190,000 definitions, 275,000 synonyms. Full installation requires about 9.9 MB on a flashcard, and provides wildcard searches, definition searches, pronunciation and etymology information and an anagram feature. To save disk space, the pronunciation and etymology files can be bypassed during installation . This program can run from system manager.

2. Collins On-Line Bilingual language dictionaries Provides English to other language translation capability. Provides 40,000 references and 70,000 translations. Installation of the program requires about 1.4 megabytes. Features include look-up facility, annotation facility where words and expressions can be added to the dictionary in an annotation file (the original entries are read only and cannot be altered), cut and paste facility and file conversion utilities. The only limitation to adding entries is the amount of disk space available. This program runs from DOS after you terminate System Manager. Add-on language pairs include French, German, Italian, Spanish.

3. Collins Series 100 Provides language translation on the Palmtop, with 75,000 references, 110,000 translations. Requires about 1.6 MB to install and can run from System Manager. Features include near matching, wildcard searches, cut and paste and hyperlink cross-references. Language pairs include French, German, Italian, Spanish. *[Price and contact information at the end of the letters section — Editor.]*

Tony D. Guzewicz
CompuServe ID [74722,421]

Which batteries are best

I've been tracking battery life for pager and Palmtop for over three years and Panasonics always outlast every other brand by a wide margin. Duracells are at the opposite end of the spectrem. In addition to their poor Palmtop life span, people have found that they cannot provide the sharp peaks of power needed by some flash cards. I can't find Panasonics discounted here so I usually use Toshibas or Evereadys. I will never put Duracells in anything more important than the pager even if work does provide them.

My estimates on battery life in a pager that is on 24 hours 7 days a week, from worst to best:

Duracells	2 weeks
All others not listed	3 weeks
Toshibas	4-5 weeks
Eveready	4-5 weeks
Panasonics	5-6 weeks
(occasionally 8 weeks)	

Jud Hardcastle
CompuServe ID: [71155,1761]

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Web Page: www.grystone.com
For more information call toll free: 1-800-600-5710

Without a Modem, What does Freeware/ Shareware Mean to Me?

I have noticed in the *HP Palmtop Paper* a lot of references to going "on line" to get wonderful freeware. However, I only have the HP 200LX 2MB and I don't have a modem or anything else to go on line with. Is there anything you could do, in future articles, to make suggestions for people like me who don't have this kind of access? All I have is my Palmtop and an auxiliary drive. It seems like half your paper talks about going on line to get a program. It doesn't help me to read about these other programs when I can't get them.

Ron Clayton,
Austin, TX

[We include references to freeware, shareware and commercial products because they significantly expand the usefulness of the Palmtop. We realize that the shareware and freeware in particular are difficult to come by for people who don't have online access. That is one of the reasons we make it available on The HP Palmtop Paper ON DISK. You can subscribe to that service for one year, or purchase an individual issue's disk (see ad, page 8, index page 60).

Going online requires the proper equipment and a subscription to an online service like CompuServe. If the Palmtop is your only computer, you can use a PC Card modem or external modem to physically connect the Palmtop to the phone lines. You can also use another PC with a modem to connect up. For more information on connect up to online services see the following articles in this issue ("Access the Internet..." page 12; "Tapping the Treasures of CompuServe" page 24).

If a friend or business associate already subscribes to CompuServe or another online service, you may be able to get him or her to download files for you.

OTHER SOURCES

*Our new **CD Infobase** CD-ROM has the current versions of the ON DISK software mentioned in the 1991 through 1995 issues of The HP Palmtop Paper (see ad, page 8). In addition, a company named Walnut Creek is marketing CD-ROMs with shareware and freeware, some of which may be useful to Palmtop users (see third party products, page 7 this issue). A library might also allow you to use their CD-ROM equipment.*

We also list references to on file locations for the software, when they are available. Commercial software is listed in our Products Index (now at the end of each article) and references include price and contact information. Occasionally a shareware/freeware source will list contact addresses and phone number(s), but most of the time they prefer to distribute their software through online services.

Finally, there are a number of companies that make shareware/freeware available on floppy disks. The way they usually work is that you get their catalog or call them with the name of the program you are looking for. If they have it, you pay a modest fee for the disk and shipping (around $5-10 per disk). You normally get one program per disk. If the program is large, it may take more than one disk. You still need to pay shareware registration fees, if they apply. The software available at one of these companies varies widely. You'll see ads for these companies in popular computer magazines.

If you get your software on disk, CD-ROM, or download it to a PC, you'll still need a way to transfer it from your PC to your Palmtop. You can do this from a PC with a PC card drive by copying the desired files to a PC memory card and then inserting it in the Palmtop. You can also connect your Palmtop to your PC via the HP Connectivity Cable and transfer files via a number of different file transfer programs.

(Letters continued on page 52.)

Low Cost Flash Solution

MagicRAM Solid State Flash Memory Cards are the ideal solution for storing data, backing up, running programs, and transferring files between your palmtop and PC. MagicRAM Flash Cards feature very low power usage for longer palmtop battery life and come with a lifetime warranty.

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8MB (up to 8MB)	$189.00	40MB (up to 40MB)	$639.00
16MB (up to 16MB)	$329.00	80MB (up to 80MB)	$1249.00

External Card Drive

MagicRAM External Card Drive is an easy and fast way to transfer files between your palmtop and desktop computers. Just plug it into your system's parallel printer port, load the Auto-Install program and you're ready to go. MagicRAM External Card Drive allows data transfer at amazing speeds of up to 250,000 Bytes/second. Supports SRAM, Flash, ATA Flash and Hard Drive PC Cards. $169.00

340MB of Storage

Now, you can store up to 340MB of programs and data with MagicDisk. Each MagicDisk consists of a MagicRAM Hard Drive PC Card and an Adapter which is specially designed for use with Hp 100/200LX. MagicDisk is easy to use, just plug it in, load the software and you're ready to go.

MagicDisk 170MB	$529.00
MagicDisk 260MB	$599.00
MagicDisk 340MB	$699.00

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Tel: (213) 413-9999 Fax: (213) 413-0828
e-mail: magicram@pacificnet.net Internet: http://www.magicram.com

MagicRAM is a trademark of MagicRAM, Inc. Stacker is a trademark of Stack Electronics, Inc.

New Products!

This section lists new products of interest to users of the HP Palmtop PCs. New Products includes descriptions of hardware, software, books, videos, training and service offerings. Prices listed in this section are suggested retail. You may be able to get the products for less if you shop around.

We invite vendors and subscribers to send us information about HP Palmtop-related hardware and software products and services they discover. We rely on information we receive from the manufacturer and cannot test every piece of hardware or software. We welcome any user feedback on product suitability.

Editorial Staff
HP Palmtop Paper

HARDWARE

CONNECTIVITY

PA-70 Adapter connects Palmtop to 1.8" hard drive

Greystone Peripherals has developed the **PA-70 Palm-Top Adapter,** which allows HP Palmtop users to connect PCMCIA 1.8 inch Hard Drives directly to their HP 100/200 LXs. With the PCMCIA Device Driver and a Hard Drive Companion developed by LTS, Palmtop users can handle data like desktop computer users, downloading files to carry with them.

The PA-70 and Device Driver have been tested with the Maxtor MXL-105-III, Epson EHDD170, Epson EHDD260, Integral 260 and MiniStor MP260P3. All the drives listed are "native" capacities except the MiniStor, and it is 130 Mbytes. There are some technical difficulty with the Integral 105 and the Integral 170.

Pricing: $99
(requires a 110 volt adapter for $10 (Outside the US use your own adapter))

CONTACT: Greystone Peripherals, 130-A Knowles Drive, Los Gatos, CA 95030 USA; Phone: 800-600-5710 or 408-866-4739; Fax: 408-866-8328; W.W.Web: www.grystone.com

Palmtop to Radiation Monitor Cable

This cable lets you easily connect your HP Palmtop to the Aware RM-60 radiation monitor, which in turn allows you to detect and plot, real-time, all three types of radiation emitted by radioactive materials. Test everything from foods to building materials, including radon levels in basements.

The cable connects to the serial port of the Palmtop.

Pricing:
Cable $25
Radiation monitor $149.50

CONTACT: Aware Electronics Corp., P.O. Box 4299, Wilmington, DE 19317 USA; Phone: 800-729-5397 or 302-655-3800. Fax: 302-655-3800; E-mail: aware@aw-el.com; W.W.Web: http://www.aw-el.com .

HP PALMTOP USER GROUPS

Those interested in participating in an HP Palmtop users group should contact the following individuals. Send us contact information formatted as below if you wish to be added as a contact for a users group in your area.

HP Palmtop Worldwide User Group News — send material about User Group activities to *Ahmet G. Ozisik at the Turkish User Group* (see contact information below).

ARGENTINA — 100/200LX users in Argentina contact: *Eric Feldsztein; E-mail: afeld-szt@econ.uba.ar. Additional contact information will be printed when available.*

Arlington, VA / Washington, DC (USA) — 95LX/100/200LX users in the Arlington, VA / Washington, DC area contact: *Rick Shaddock, c/o Computer Instructors Corporation, 2320 South Eads, Arlington, VA, 22202; Phone 703-486-2222.*

Cleveland, OH (USA) — 95LX/100/200LX users in the Cleveland area, contact: *Craig de Fasselle, c/o MEM, Inc., 4702 East 355th St., Willoughby, OH 44094.*

Boston, MA (USA) — 95LX/100/200LX users in the Boston area, contact: *Bryan Krauthamer; Phone: 617-374-9600 x 197 (work); Fax: 617-374-9620; CompuServe ID: [70444,41].*

BRAZIL — 95/100/200LX users in Brazil, contact: *Marcos L. Pedroza, Rua Trairi 647 Ap 104-B, 59020-150 Natal, RN-BRAZIL; Phone: 55 84 211-6162.*

Charleston, South Carolina (USA) — 95/100/200LX users in South Carolina, contact: *Ron Rivers, P.O. Box 31284, Charleston, SC 29417-1284; Phone: 800-864-8444; CompuServe ID: [75023,44].*

Denver, CO (USA) — 95LX/100/200LX users in the Denver area, contact: *Bill Hoeltgen, 5944 S. Kipling, Suite 300, Littleton, CO 80127 Phone: 303-933-0023; Fax: 303-971-0347.* Group meets quarterly.

Detroit, MI (USA) — 95LX/100/200LX users in the Detroit area, contact: *Jeff Zorn, 29311 Ara-nel, Farmington Hills, MI 48334-2815; Phone: 313-489-1855 or Louis Peeples, St. Clair Shores MI 48080; Phone: 313-777-9390.*

FRANCE — HP Palmtop users in France, contact: *Olivier Della Valle, 178 rue du Marechal Leclerc, 94410 Saint-Maurice, FRANCE; Phone: (1) 43 53 95 67; CompuServe ID: [101533,160]*

GERMANY — HP Palmtop/Omnibook users in Germany, contact: *Eckart Prinz, Obere Mühlstr. 56a, 64291 Darmstadt, GERMANY; Phone/Fax: +49 6151 376065.*

GERMANY / LUXEMBOURG — Not an official user group but this individual is willing to help HP Palmtop users with questions or technical problems; contact: *Gilles Koh; CompuServe ID: [100114,3146]; Phone: +49-721-69-36-55 (after 6 p.m. Central European time).*

GREECE — HP Palmtop users in Greece, contact: *Stavros D. Zacharakos, Sofocleous 33, Athens 151 26, GREECE; Phone: (+3-01) 8050041; Mobile Phone: (+3) 093-254-717 24hrs.; Fax: (+3-01) 8050041...* **OR...** *John Tatsiramos, c/o TAFARM, 70 Andritsenis Street 111 46 - Galatsi, GREECE; Phone: (01) 29.17.401; Fax: (01) 29.28.174.*

HOLLAND/BELGIUM — HP 95LX/100/200LX users in the low countries, contact: *PROMPT HP-GC, Mister G. Dongs, Postbus 1081, 1500 AB Zaandam, HOLLAND; Phone: +31 75704205.*

INDONESIA — HP Handheld users (HP 75C, 110, 48, 12, 100/200LX) in Indonesia, contact *Dirk H. Eversbert, c/o P.T. Austindo Mitratama, Mr. Elman Sunarlio, Jl. Gunung Sahari 2/6E, Jakarta 10610, INDONESIA.*

ITALY — 95/100/200LX users in Italy, contact: *Stefano Gigli, Via E. Toti, 13-60123 Ancona, ITALY; Phone: 071-36845 or 071-200916; Fax: 071-200916; Internet ID: S.Gigli@agora.stm.it; Fido-Net ID: 2:332/316.4.*

JAPAN — HP Palmtop users in Japan, contact: *Georg O. P. Eschert, Ekimae 1-11-10, Koriyama City, Fukushima Pref., JAPAN 963; Phone: 040-12-06980; Fax: 0249-21-4050. (Languages: German, English and Japanese)*

Kansas (USA) — 95/100/200LX users in Kansas, contact: *Marietha Wilson, P.O. Box 1151, Manhattan, KS 66502-0012; Phone: 913-532-9775.*

Los Angeles, CA (USA) — 95LX/100/200LX users in the LA area, contact: *Dave Shier at 805-371-9391; Fax: 805-371-9391; CIS: [75030,3374] for more information.*

MEXICO — Palmtop users in Mexico, contact: *Jose Patino, Ave. Trasvina y Retes #2103, Chihuahua, Chih. CP. 31240, MEXICO; Phone: (14) 26-50-43; Fax: (14) 81-01-75; Internet: jose_patino@dgc.ceo.dg.com OR... Francisco Bricio; Phone: (3) 684-1317; CompuServe ID: [74174,1442]*

Minneapolis, MN (USA) — HP Palmtop users in the Minneapolis/St. Paul area, contact: *Beth Silverwater, P.O. Box 27044, Minneapolis, MN 55427; Phone: 612-541-5631; Fax: 612-541-5636; E-mail: 73502.3645@compuserve.com*

New Jersey/New York (USA) — 95LX/100/200LX users in the New Jersey/New York area, contact: *Stanley Dobrowski, 169 Springfield Avenue, Rutherford, NJ, 07070-1642; CIS ID: [76711,2302]; Phone: 201-807-5857 (work).*

Oklahoma City, OK (USA) — 95/100/200LX users in the Oklahoma City area. contact: *Richard B. Meek, 1804 Huntington, Oklahoma City, OK 73116; Residential Phone: 405-842-1267.*

PANAMA / LATIN AMERICA — HP Palmtop users in Panama or Latin America, contact: *Aviran Yanir, P.O. Box 31002 Colon Free Zone, REPUBLIC OF PANAMA; Phone: 507-4410442; Fax: 507-4410473.*

PHILIPPINES — HP Palmtop users in the Philippines, contact *Carlos: Caliwara, 2nd. floor, DHMC Bldg., 109 Neptune St., Bel-Air, Makati City, PHILIPPINES; Phone: (632) 8906229 to 36, extensions 120 & 121; Fax: (632) 9285635; Internet ID: law1@mail.ph.net*

PORTUGAL — 95LX/100/200LX users in Portugal, contact: *PPTUG, Rua da SFUAP, A-B, 2810 Laranjeiro, PORTUGAL; Phone/Fax: 351-1-2597216; Internet: sulplano@individual.puug.pt.*

Richmond, VA (USA) — 95LX/100/200LX users in the Central Virginia area. contact: *John Haskell, 7102 Three Chopt Road, Richmond, VA 23226-3615. CIS ID: [70750,1243] or Phone: 804-288-6073 (work).*

San Diego, CA (USA) — 100/200LX users in the San Diego area, contact: *Don Williams at 619-452-6267 or 619-546-8166; E-mail: donw@cts.com for more information.*

TURKEY — HP Palmtop users in Turkey, contact: *Ahmet G. Ozisik, Soyak Binasi, Buyukdere Cad. 38, Mecidiyekoy, Istanbul 80290, TURKEY; Phone: (212) 275 09 10 (ext. 309); Fax: (212) 211 57 61; E-mail: ozisika@doruk.com.tr*

UKRAINE — HP Palmtop users in the Ukraine, Odessa, Kiev, Crimea regions. contact: *Linetskyy V. Oleg, 1, Varvarovsky Spusk, Nikolaev, 327015, UKRAINE; Phone: (051) 36-73-51 36-73-13; Fax: (051) 24-41-25.*

UNITED KINGDOM — HP Palmtop users in the United Kingdom, contact: *Michael A. Brown, MBA Group, 33 Albury Avenue, Isleworth, Middlesex, TW7 5HY, U.K.; Phone: 0181-847-3777; Fax: 0181-568-2402.*

Visitors to the 1996 Summer Olympics in Atlanta

Atlanta, GA (USA) — 100/200LX users in the Atlanta area, and Palmtop users visiting the 1996 Summer Olympic games in Atlanta, should contact: A.K. Avasthi at 770-471-1389. Special activities planned for Olympic visitors.

SOFTWARE

SOFTWARE ON CD-ROM

To access this software you will need a desktop with a CD-ROM player.

CD-ROM Products Pack

These following five CD-ROMs from Walnut Creek, provide a wide variety of programs for DOS users (possibly useful on the HP Palmtop).

Simtel for MS-DOS

Use this 2-disk set 6,500 files for programmer's shareware from satellite programs to books, spreadsheets to animation software.

Power DOS

This CD is packed with DOS programs including:

17 anti-virus programs;
878 games and game cheats;
221 network programs and TCP/IP programs;
375 patches to upgrade commercial software packages;
259 sound drivers, patches, support/MOD players;
66 utilities for disks, keyboards, memory, printers and tape drives;
71 graphics drivers, ray tracers, viewers and painters;
57 programming utilities and source for assemblers, C and Modula;
57 demos of commercial software and games.

The Scientific and Technical Library CD ROM 2nd Edition

Virtually all available technical and scientific shareware programs for MS-DOS and Windows are packed on this disk. It comes with an indexed book describing every program.

Business Software Library CD ROM

Programs on this disk cover all aspects of business—from finance to desktop publishing. It comes with a 160-page reference book detailing the contents of the CD. Use this package to:

* gain financial control with accounting, payroll, and bookkeeping software,
* manage time with client, contact, and project tracking tools,
* create convincing presentations with slides, desktop publishing, grammar and spell-checking software,
* track investments with financial/estate planners.

Project Gutenberg on CD-ROM

This collection includes complete texts from 350 volumes of the world's most commonly used and referenced works of literature. Additionally, it includes motion pictures and stills of the Apollo 11 lunar landing, presidential inaugural addresses, and historical documents like the Magna Carta and the US constitution.

This version contains all files collected in 1991 through 1995. The disk is updated about every six months to include recently transcribed works.

Pricing:
Simtel for MS-DOS $29.95
(Subscription $19.95, updated about every 3 months)
Power DOS $19.95
Scientific/Tech Lib: $39.95
Business Lib.: $39.95
Project Gutenberg: $39.95
(Subscription $24.95)

CONTACT: Walnut Creek CDROM, 4041 Pike Ln Ste D-904, Concord, CA 94520 USA; Phone: 800-786-9907 or 510-674-0783; Fax: 510-674-0821; E-mail: orders@cdrom.com; W.W. Web: http://www.cdrom.com

PDA Developers Conferences on CD-ROM

The PDA Developers East/West, 1995-1996, includes the slides of most of the presentations from both PDA Developers conferences (Nashua, NH Aug. 1995 and San Mateo, CA Jan. 1996) , plus other highlights, including:

* PDF-formatted versions of the GEOS 2.1 SDK documentation;
* PDF-formatted versions of the Magic Cap 1.5 developer documents;
* Freeware and shareware developer goodies like IZL, PAL, Newt and more; and
* A QuickTime version of the amazing and truly excellent Bowser movie from General Magic's first developer conference.

Pricing: $70,
($55 for PDA Developers subscribers and conference attendees. Plus $7.50 shipping and handling in North America, $12.50 to all other locations).

CONTACT: Creative Digital Publishing Inc., 293 Corbett Avenue, San Francisco, CA 94114 USA; Phone: 415-621-4252; Fax: 415-621-4922; E-mail: cdi@cdpubs.com or 74774.50@compuserve.com; W.W.Web: http://www.cdpubs.com

DATABASE

PROCITE

ProCite is a bibliographic database that allows you to search for relevant references on a particular subject of

Add a Printer Port to your HP Palmtop

The capabilities of the HP-Palmtop are now expanded by using Quatech's SPP-100 Parallel/Enhanced Parallel Port PCMCIA card. The SPP-100 adds a new dimension for Palmtop users by adding not only IBM PC parallel port capabilities, but also providing hardware support for the IEEE 1284 bidirectional EPP standard. Besides printer applications, the SPP-100 offers users a needed interface to popular external storage tape drive units.

This Type II card includes a cable which features a standard DSUB-25 for easy connection to external peripherals. A client driver and an enabler program are also provided for customer configuration and use. The SPP-100 is FCC and CE certified and can be purchased directly from Quatech or through its network of international distributors. For further information call 800-553-1170 or 330-434-3154.

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- Subscriber PowerDisk (Each Fall)

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Steve Mitchell
Middleburg, Indiana

Order back issues of The HP Palmtop Paper while they last

Like the HP Palmtop? There's plenty of useful information already published. HP 95LX users will especially benefit from thirteen 1991-93 issues, and HP 100LX and HP 200LX users will appreciate the twelve 1994-95 issues. Included is a Subscriber PowerDisk for each year.

"Best Tips On Disk" comes free with The HP Palmtop Paper On Disk subscription

The HP Palmtop Paper On Disk

Get a supplemental disk containing all the great freeware and shareware you read about in each *The HP Palmtop Paper.*

This supplement to *The HP Palmtop Paper* also contains detailed information from advertisers plus the full text of *The HP Palmtop Paper* for text search.

Best Tips On Disk: Free or can be ordered separately.

Each year we compile the best palmtop tips and the best freeware and shareware and put it on two 1.44 Meg floppy disks. Included FREE only with your *The HP Palmtop Paper On Disk* subscription, or can be purchased separately.

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Like *The HP Palmtop Paper*? The same editorial team creates the quarterly publication *HP OmniGo World.*

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your choice. You first load ProCite with the articles you want — from a library database, an online service, or from another user. Then you search for all relevant references to a subject in question. Finally, you export the articles listed to your word processor for formatting.

ProCite DOS lets you perform the search you want in one menu, then enter another menu to manipulate the records you recovered.

Price: $345
Contact: *Personal Bibliographic Software, Inc., P O Box 4250, Ann Arbor, Michigan, 48106, USA; Phone: 313-996-1580.*

SHAREWARE &FREEWARE

CIS Software Distribution Service Announcement

The SNGDEV.ANN text file describes a new software distribution service on CompuServe called Software-on-the-Go. This service will specialize in software for Palmtops, PDAs, Portable PCs, Calculators, and Electronic Organizers and is open to all software developers and distributors. This service will allow members to purchase software directly and download it free of connect time charges. Purchases will be added to the members' monthly CIS bill. Product submittal form and contact information is included.

Name: .....SNGDEV.ANN
Size: .....17573 bytes
Location: .....HPHAND, Library 15

Draft Choice

Use DRAFT Choice ((DCHP .ZIP) to design an outdoor deck, laying out schematics or developing organizational charts. Then transfer your drawings to your desktop to edit, make reports, and print. Your drawings can be sized to fit in the screen or you can zoom in and out of portions to work on details. The command interface is well organized, and the editing tools make your projects easy to modify. You can use your flash card to emulate EMS, thus being able to create drawings with 32,000 elements each.

Line, Box, Circle, Arc, Polygon, Ellipses, Bezier curves, Complex Polylines, Spline, Tape and Freehand curves can be drawn with a single command. Other features include auto-dimensioning in multiple unit types, symbol creation and management capabilities, Fill and Hatch patterns, Linestyle and thicknesses, etc.

Name: .....DCHP.ZIP
Status: .....Shareware
Location: .....HPHAND, Library 11
CONTACT: Paris Karahalios; CompuServe ID: [72727,616] or TRIUS, Inc. [71333,103]

ECGvu.ZIP Provides ECG Image

ECGvu is a 12-lead ECG reference for the HP Palmtop based on the ECGs from Marriott's 9th edition of Practical Electrocardiography. This may be useful as a clinical or education tool. (See contact information in HPECHO.ZIP below.)

HPECHO Demonstrates Echocardiogram on the Palmtop

An echocardiogram is an ultrasound of the heart. HPECHO is a demonstration of an echocardiogram for the Palmtop. It is 18 image frames representing "one cardiac cycle" that are played at 15 frames per second. The frames were digitized and converted to PCX files for viewing on the HP Palmtop's screen.

Name: .....HPECHO.ZIP
ECGvu.ZIP archived in HPECHO.ZIP.
Pricing: .....Freeware
Location: .....HPHAND, Library 11
CONTACT: David E. Albert M.D. of Data Critical Corp.; CompuServe ID: [71212,3421] or Internet e-mail: dalbert@datacrit.com .

Flexpad Text Editor with Labeling Capability for Searches

FLEXPAD, now in version 1.1, is a text editor with a toolbox of labels that you can add to the text anyplace you desire in order to make the text file into a handy appointment book and todo list manager. Once you apply the labels to your text, you can view them in various ways, including Daily, Weekly and Monthly calendars. An "only" view allows you to see each occurrence of a search phrase. Data is held in RAM, making searches faster than APPT. DOS compatible program which also runs on 95LX and desktop/laptop PC's.

Name: .....FLEXPAD.ZIP
Location: ....HPHAND, Library 11 or
Shareware fee $35
Direct from author on disk (add $5SH)
CONTACT: Paul Kramer, One Linden Place, Woodland, CA 95695 USA; E-mail: 72276.3602@compuserve.com.

Guitar Chord Database

CHORD.ZIP is a .GDB Database file containing guitar chords. It includes finger setting and positioning for each of the guitar chords. CHORD.ZIP includes more than 170 guitar chords and can be used for other string instruments.. CHORD.ZIP also and supports different string tunings. The author has included a description on usage in the Note field of the first record. This is the pre-release version with the full version containing over 1000 chords. The author welcomes feedback.

Name: .....CHORD.ZIP
Size: 11K
Status: .....Freeware
Location: .....HPHAND, Library 11
CONTACT: *Ronald Leunis CompuServe ID: [101564,3316]*

Latest version of LX-DIAL

LX-DIAL.ZIP contains the version 1.5 release of LX-DIAL.EXE, a tone dialer program for the HP 100/200lx. Some highlights of LX-DIAL V1.5 include support to dial with modems, full support for calling cards, a paste function to read the clipboard whenever the user wishes, a fast clipboard format to speed up loading LX-DIAL, MS-WORD documentation, new documentation for LXDT setup and the dialing logic of LX-DIAL, a correction of an error in earlier versions of LX-DIAL that stops dialing if a space is in the number string, and an update LXDT to accept parameters for tone length and inter digit delay.

Name: .....LX-DIAL.ZIP
Size: 64K
Status .....Freeware
Location: .....HPHAND, Library 11
CONTACT: Dr. ing. Carl-Werner Oehlrich, CompuServe ID: [100577,3131]

QuickStar Fax Pro Sends Faxes Fast

With QuickStar Fax Pro Version 1.04 (QFAX) send one or many faxes quickly and easily from the Palmtop. A regular 12-page text file can be faxed in four min-

utes at a 14400 bps modem speed. You may also use this program for sending hundreds of faxes automatically. The C program included to demo batch fax sending.

Name: ..... QFAX.ZIP
Size: ..... 105728 Bytes
Status: ..... Shareware
Location: ..... HP Hand, Library 9

QVCOM 🖫 program for connecting to Casio digital camera

QVCOM is a communication program that lets you connect a Casio QV-10 digital Camera to an HP Palmtop and transfer CAM format picture files to the Palmtop. Bitmap files (monochrome or color) can be retrieved from QV-10 to your Palmtop to be used in other applications.

Three graphics formats are supported by QVCOM:

1. CAM format (CASIO original format). QVCOM can send to and receive this format from the QV-10.

2. Bitmap data (Full color). QVCOM can receive bitmap data from the QV-10. It cannot send the data to QV-10 from the Palmtop. The bitmapped file can be utilized by other desktop or notebook with color graphic capability.

3. Bitmap data can also be converted to monochrome bitmap data for viewing on 100/200LX.

This program was created by Masaki "Brahma" Tsumori. User's guide translated to English by Toshiki Sasabe. The program is offered "as is" and the author is no longer developing QVCom because Casio is not making QV-10 technical information public. The author of this program feels that technical information should be made available to the public and that Casio's policy will cause them to miss an important business opportunity.

(For more on this, see page 16 of the Jan/Feb 96 issue of *The HP Palmtop Paper.*)

Name: ..... QVCOM.ZIP
Size: Bytes: 24822
Location: ..... HPHAND, Library 9
CONTACT:Toshiki Sasabe (Janbe); CompuServe ID: [73560,524]

ZIP 2.02 🖫 File Transfer Program

ZIP 2.02 is the latest version of a popular Palmtop communications program that transfers files back and forth from Paltmop to another PC, creating directories as needed. It takes up no TSR RAM space, doesn't need to be loaded as a driver, and can back up an entire HP Palmtop with a single command in a couple of minutes. This version solves most operating problems of previous versions. And it comes with an icon for the Application Manager.

Name: ..... ZIP.ZIP
Location: ..... HPHAND, Lib. 7
CONTACT: Eric Meyer; CompuServe ID: [74415,1305].

PUBLICATIONS

The Hand-held Systems Integrator Directory (HSID)

Use HSID to discover ways of integrating hand-held computers with MIS and wireless operations. HSID contains detailed information about platforms, software-development tools, system integrators, and enabling technologies. It covers the full range of handheld systems, including PDAs, personal communicators, Palmtop computers, and specialized handheld devices.

The Directory will be updated twice a year. The first issue is scheduled to be released in June, 1996.

Pricing:
Single issue $25
Annual $40
CONTACT: Creative Digital Publishing Inc. 293 Corbett Avenue, San Francisco, CA 94114 U.S.A.; Phone: 415-621-4252; Fax: 415-621-4922; E-mail: cdi@cdpubs.com or 74774.50@compuserve.com; W.W.Web: http://www.cdpubs.com

Outlines in Clinical Medicine

For clinicians and medical students with little time to read, Outlines in Clinical Medicine provides succinct summaries of over 700 topics encountered in general internal medicine, internal medicine subspecialties, family practice, and other areas. It is updated approximately every four months with information from more than seven major medical journal publications. Information is also drawn from seminars, review articles, patient care, and teaching experience.

The HP version is now available through a new online delivery system. 1st Stop Software is providing delivery of Outlines via the Internet. You can download Outlines from the Internet via NetScape or Microsoft's Internet Explorer. When you get the file contact 1st Stop to pay for the software and obtain an unlocking key specific to the program.

An online demo of Outlines is available at http://www.mv.com/biz/k2/ocmut.html.

Requirements: HP Palm Top 95, 100 or 200 LX and a PCMCIA Memory Card.

Pricing:
Medical Student: $125
Medical Resident: $150
Physician (non-student) : $175
ONLINE CONTACT:http://www.1stopsoft.com/K2
CONTACT: K2 Consultants, Inc. 33 Green Heron Lane, Nashua, NH 03062 USA; Phone: 603-551-5544; Fax: 603-888-4666; E-mail: sandeep@tiac.net; W.W.Web: http:// med-www.bu.edu/newton.medical/k2/home.html .

CONFERENCES

HP Handheld Conference Scheduled in Anaheim

Palmtop users will have a chance to ask questions and give input directly to a panel of HP personnel including Kheng-Joo Khaw, General Manager of HP's Asia Pacific Personal Computer Division. For details see page 33.

PDA Conferences and Expo in Chicago

Creative Digital will host PDA Developers North and PDA Expo, at the Inland Meeting & Exposition Center, Westmont, IL, 20 minutes from Chicago's O'Hare Airport.

PDA Developers North — September 11-13, 1996

PDA Developers North is a three-day technical conference for developers creating products for PDAs, handheld computers, palmtops and PICs. Highlights include:

* Half-day tutorials on Newton, Magic Cap, Psion, GEOS, Pilot and HP Palmtop development;
* Panels on industry directions featuring leading executives from hardware and OS manufacturers;
* Open forums with tech support and product managers from the leading hardware and platform manufacturers;
* Wireless software development tools and services;
* Advanced programming topics;
* A full day of exhibits on September 13, with special developer bundles;

* New technologies, great keynotes and lots of surprises.

PDA Expo
September 14, 1996

A one-day PDA Expo at the same location following the developer's conference described above. Attendees at PDA Developers North can attend the Expo, including all presentations, at no charge.

The Expo is designed for both corporate users and individuals. In addition to a keynote by Jeff Hawkins, Vice President and Chief Technologist, US Robotics, there will be an educational conference with full-day tracks on:

* Corporate PDA-based solutions presented by leading systems integrators;
* Getting the most out of your PDA as a productivity tool; and
* PDA industry solutions for specific vertical markets.

There will be additional presentations on Internet and W.W.Web access, desktop connectivity, content creation, forms packages and other topics.

Keynotes, sponsors and agenda specifics will be regularly posted to Usenet, Creative Digital's Web site (http://www.cdpubs.com) and their CompuServe forum (GO NEWTVENS).

PDA Conference registration fee:

Until June 15 .....$450
Until August 15 .....$500
After August 15 .....$550

(Includes breakfast and lunch all three days. A block of suites are available at the nearby Oakbrook Hilton Suites for $109. Roommate matching service available for attendees that want to share a suite.)

PDA Expo registration fee:

There is no admission charge for the keynote or the exhibits. In addition, the Expo is free to registered attendees of the PDA conference. For all others, the registration fees for the PDA Expo alone are as follows:

Until June 15 .....$40
Until August 15 .....$50
After August 15 .....$65

CONTACT: Creative Digital Publishing Inc. 293 Corbett Avenue, San Francisco, CA 94114 USA; Phone: 415-621-4252; Fax: 415-621-4922; E-mail: cdi@cdpubs.com or 74774.50 @compuserve.com; W.W.Web: http://www.cdpubs.com.

Upgrades, Updates & Corrections

D&A Software Inc. Produces ABC/LX

In Best Products article in your Best Tips 1996 bonus issue we mentioned ABC/LX battery monitoring software and stated that it is a new product from Shier Systems. It was really produced by D&A Software Inc., and distributed by Shier System and Rundel Datentechnik in Germany.

ABC/LX .....$34.95 (US)

CONTACT USA: Shier Systems & Software, 920 Hampshire Road, Suite A, Westlake Village, CA 91361, USA; Phone: 805-371-9391; Fax: 805-371-9454; E-mail: 74777.2477@compuserve.com; OnLine: http:\\www.shier.com.

CONTACT GERMANY: Rundel Datentechnik, Rappen Str.20, 73033 Goeppingen, GERMANY; Phone: 49-71-611-3299; Fax: 49-71-612-4473.

Grip-it Strips contact information

In our last issue we described Grip-it Strips, which can be applied to Palmtops to keep them from slipping through your fingers. Order this product from:

Better Hold Products, Inc., 3 Portola Rd., Portola Valley, CA USA; Phone: 800-854-4828 or 415-854-4233; Fax: 415-854-4253.

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Direct, one-step transfer and translation between your HP Palmtop and supported software applications.

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✓ **Specify exactly what data to send and where**
Use custom field maps and filters to customize your transfer. Transfer only the data you need; ignore what doesn't need to be updated.

Supported Applications

ACT! for Windows 1.1/2.x	Commence 2.x	Excel 5.0/7.0	PackRat 4.1/5.0	Windows Cardfile/Calendar
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ASCII (CSV)	dBASE III/IV/V	Schedule+ 1.0/7.0	Sidekick 2.0 for DOS	Wordperfect for Windows 6.0
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Access Internet with Your HP Palmtop

Send and receive e-mail, surf the World Wide Web, visit Newsgroups, up- and download files, and log on to another computer half-way around the world — all from your Palmtop.

By Jesper E. Siig

With all the media hype about the "Net" you might get the impression that it's some complex, well organized, world-wide organization providing an information network. Well, there's no phone number you can call to talk to someone at "The Internet Company." All Internet is, is a huge bunch of independent computers around the world linked together via phone lines, allowing them to exchange information. That exchange of information is what makes the Internet interesting, along with the possibilities that lie in the different services offered by Internet providers.

Internet grew from a military network called the ARPAnet, designed to be totally de-centralized. This is one of the reasons for the total anarchy which seems to rule the Internet. Fortunately, over the years a number of different services have been made available on the Internet to make order out of anarchy. Lately, five have emerged as the most important:

- E-mail — turning your computer into an electronic mail box.
- The World Wide Web — an Internet service that links hypertext documents between computers on the net.
- Newsgroups — Forums where a specific topic is discussed.
- File Transfer Protocols — A way to transfer specific text files and software programs from other computers on the Net to yours.
- Telnet — A way to connect and log on to another computer on the Net and make use of the files and programs on that system.

We'll look a these services in depth and discuss how they can be accessed from the HP Palmtop, starting on page 16. But first, let's look at what is necessary to physically connect an HP Palmtop to the Internet.

Connecting up to the Internet with the HP Palmtop

The way you choose to access the Internet influences what Internet resources will be available to you once you're connected. The rest of this article describes how to connect to the Internet via the HP Palmtop and what additional hardware and software you'll need to access the Internet services described above.

Hardware needed to connect to the Internet

You'll need the HP Palmtop PC, some type of modem and a cable to connect the modem to an active phone jack. There are many PC Card modems available that work with the HP Palmtop, including the **Megahertz XJACK**, **Smart Modem, EXP ThinFax**, and more. All you have to do is slip them in your Palmtop's card slot, connect them to a phone line and dial the appropriate phone number (more on that later). You can also use many external modems that use their own power source. External modems that draw their power from the computer they are attached to will not work with the HP Palmtop. (See the product index at the end of this article for price and contact information on the above products.)

You can also send and receive Internet e-mail from your Palmtop using wireless communications services like **RadioMail**. In addition, if you have access to a LAN

ABOUT THE AUTHOR

Jesper E. Siig works as an Internet Consultant for Digital Equipment Corporation; Denmark. He studied computer science and English at the University of Copenhagen and lives in Copenhagen with his wife and two children. Jesper uses his Palmtop both for business and pleasure. You can contact Jesper on CompuServe at [700660,3503] or via the Internet at jesper.siig @dmo.mts.dec.com.

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(Local Area Network) that is connected to the Internet, it may be possible to connect your Palmtop to your LAN using a **Silicom PC Card LAN Adapter** and access Internet through your LAN.

Selecting an Internet service provider

It is possible to directly access the Internet. But this requires expensive equipment and dedicated phone lines. Most users go through an intermediary know as an "Internet service provider" (ISP). These service providers have the equipment and dedicated lines necessary to connect directly to the Internet and provide their subscribers access to the services of the Internet through their connection. Subscribers use their own computer and modem to log onto the service provider's computer and access the Internet through it.

Many large companies and educational organizations are already connected to the Internet, either through service providers or via direct access using their own equipment. If you're lucky, you may already have access to the Net and not know it. Check with your organization's computer systems administrator.

Whether you access the Internet through an ISP or via direct access, there a basically two ways of connecting to the Internet: a "Shell Account" or via an "IP connection."

Access shell accounts using the HP Palmtop

A shell account is the most common way to connect to the Internet. The user connects up to the service provider's host computer from his or her computer via computer/modem and a terminal emulator, is prompted for username and password, and is logged into his or her shell account.

Note on the format of Internet addresses in this article

Internet addresses can be quite long. Because of the width of the columns in this publication, we had to put a single address on two lines. For example, {COMMO} in the second column on this page lists two Internet addresses, each occupying two lines with a space separating the addresses. When entering one of these addresses in a communications program, the entire address goes on one line, with no empty spaces between anything. The address can be case sensative.

The service provider's host computer is usually a Unix system (as opposed to a DOS or Windows system). The subscriber will either have to know his or her way around cryptic Unix commands, or run a Unix shell program that provides more user-friendly menus to access the features of the system. Service providers may also set up a menu system on the host to make it easier for the user to choose desired services. Either way, the user is limited by the Internet features and services installed on the service provider's host Unix system.

The traditional way to connect to a Unix system uses a VT emulator (a.k.a., "character cell video terminal emulator"). A "terminal" is simply a screen and keyboard along with the circuits necessary to connect it to a computer. In the days of main frame computers, everyone worked on a terminal that was connected via cables to the computer that was located off in a room somewhere.

A "VT emulator" (like the Palmtop's built-in Datacomm program) is a small software program that "teaches" your Palmtop how to behave like the terminals used by Unix systems. It emulates VT100, VT220, and ANSI terminals. This allows the Unix system to recognize the Palmtop's keystrokes, and display information on the Palmtop's screen. Some terminal emulators like Datacomm have "scripting" capability. This allows users to write small "scripts" that automatically call up the host system and perform certain tasks.

To copy files between the service provider's host computer and the user's computer, both systems have to have the same file transfer protocol available. The most common protocols are Kermit, Xmodem, Ymodem and Zmodem. All are built into the HP 100/200LX and can be selected from Datacomm's File Transfer Protocol screen by pressing [MENU] File Protocol.

As mentioned above, the most common file transfer protocols are built into the Palmtop and accessible through Datacomm. Listed below are some additional programs that provide terminal emulators or file transfer protocols:

{COMMO} (COMMO.ZIP)
This small, robust communications program, has a very decent VT102 terminal emulator built-in. {COMMO} is a shareware program and can be found on-line at the following locations:

Internet:

ftp://eddie.mit.com/pub/hp95x/NEW/commo641.zip

ftp://oak.oakland.edu/Simtel/msdos/modem/commo641.zip

CompuServe:

HPHAND 100/200LX
Datacomm COMMO.ZIP (V6.6)

Kermit (KERM2.ZIP)
This freeware communications program supports VT102 emulation. This earlier version of Kermit take up much less RAM than the most recent one, and will probably provide all the capabilities you need. Kermit can be found in the following locations:

Internet:

ftp://eddie.mit.com/pub/hp95x/comm/kermit2.zip

CompuServe:

HPHAND Library 5, KERM2.ZIP

Access Internet Protocol connection (SLIP/PPP) using the HP Palmtop

Recently more and more service providers allow users to make a temporary direct connection to the Internet. This is done using either the Point-to-Point Protocol (PPP) or the Serial Line Internet Protocol (SLIP).

As was the case with shell accounts, the user dials up and logs onto the service provider's host system using either a terminal emulator (described above) or a dedicated dialer program. After the user connects with the host system, either the host automatically starts the PPP or SLIP program, or the user runs the program from his Palmtop. From here on, the user can access the features of the Internet just like any other system on the Internet.

Listed below are one PPP and one SLIP program that can be used on the Palmtop:

EtherPPP (in INETDOS.EXE)
This program can be used in connection with DosLynx (a DOS-based Web browser) and Minuet (see page 20, a suite of Internet applications, developed at the University of Minnesota) to establish a PPP connection from the HP Palmtop to a service provider's host system.

Internet:

ftp://ftp2.cc.ukans.edu/pub/WWW/DosLynx/support/etherPPP.zip

CompuServe:

CIS: Internet New Users / CIS Dial PPP PCs / ETHPPP.ZIP

Slipper (SLIPARC.ZIP)
If your service provider only allows a SLIP connection, you can use SLIPPER to establish the connection.

Internet:

ftp://ftp2.cc.ukans.edu/pub/WWW/DosLynx/support/slippr15.zip

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MyIP (in INETDOS.EXE) — When you create an Internet Protocol connection using the SLIP or PPP protocols, you are assigned a TCP/IP address. (TCP/IP is the standard protocol with which two machines on the Internet talk to each other.) The Internet programs you run will need to know this address and MyIP will set it for you automatically.

CompuServe:

Internet New Users /
CIS Dial PPP PCs / MYIP.ZIP

Five important Internet services

These services can be accessed by any computer user, not just Palmtop users.

1. E-mail
"Electronic mail" is probably the most important and utilized feature of the Internet. It turns your computer into a mailbox from which you can send and receive short or long messages to anyone in the world with an e-mail address.

First you have to get an account and e-mail address with an Internet service provider. Many business and educational networks interface with the Internet, allowing their members access to the Net. Once you have the e-mail address and the appropriate software on your computer, you can send e-mail to any other e-mail address around the world.

For example, my e-mail address is **jesper.siig@dmo.mts.dec.com**. The first part of this address, "jesper.siig" identifies the name of the person to whom you want to send the message. This part of the address can also be an I.D. number, or an alias. The second part of the above address, "@dmo.mts.dec.com" identifies the Internet service provider or organization where the individual's Internet account is located.

2. World Wide Web
This is also known as WWW or simply The Web. It came in late, but has played a very essential part of the popularization of the Internet.

You can conceive of the World Wide Web as one large hypertext document, made up of an almost infinite number of smaller documents on subjects too numerous to conceive. It's a little like walking into a spider's web. It's easy to get caught there, and hard to extract yourself.

Various programs have been written to help you find your way around the World Wide Web. Most of them run on Windows PC's, but programs also exist for Macs, DOS PCs, MOTIF and VT terminals.

The key to finding something on the WWW is a Uniform Resource Locator, or "URL." A URL combines information about the address of the site where the resource is located, the subdirectory location of the resource, (where used) the name of the file, and the type of protocol being used. (A protocol is a set of rules that govern the way one machine communicates with another.)

Take a look at the following sample URL describing the location of a document that provides information on connecting a Palmtop to a UNIX shell account:

http://netmar.com/
users/doc/local/inet200.txt

This URL is a single line address, but is wrapped to two lines here and throughout this article to fit the column format. Understand the above URL as follows:

http — An Internet protocol used for transmission of hypertext information.

:// — Standard URL punctuation separating the protocol from the domain name.

netmar.com/ — "Domain" name of the system where the resources are stored.

users/doc/local/ — Description of the directory and subdirectory "path" leading to the resource.

inet200.txt — Name of the file to be retrieved.

3. Usenet Newsgroups
Usenet is not a formal network, but a large number of systems (known as "news servers") that exchange messages (referred to as "articles") organized into subjects (known as newsgroups). Communications between news servers is done using the "Net News Transfer Protocol" (NNTP).

An individual Usenet newsgroup is a forum where a specific topic is discussed by members sending messages back and forth. Almost any topic you can think of has a newsgroup devoted to it. At the present more than 14,000 newsgroups exist.

No single person or organization controls Usenet. Individual Usenet nodes are maintained by corporations, educational institutions or individuals who implement a newsgroup at their own expense.

To access a Usenet newsgroup, you need to know its name and the name of the system hosting the newsgroup, know as the "news server." Different news servers host different newsgroups. You may be able to access a specific newsgroup from a number of different news servers. However, not all news servers provide access to the same newsgroups.

Usually your network administrator or Internet service provider will be able to supply newsgroup and news server information. You'll probably also be using a "newsreader" on your computer. This software helps automate the process of connecting to the desired newsgroup, downloading and uploading messages, sorting them into threads, and displaying the articles. Most newsreaders can generate a list of newsgroups for you.

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Newsgroups are named following an accepted set of rules, leading off with an identifier that tells the type of newsgroup it is, and followed by a more specific name. Take a look at the following newsgroup name:

news:comp.sys.palmtops

Understand the name of this newsgroup as follows:

news — Not part of the newsgroup name, but tells a web browser that you will be using the NNTP protocol to access comp.sys.palmtops.

comp — a computer related subject concerning a specific

sys — computer system,

palmtops — palmtop-related information.

Some newsgroups support the sending and receiving of binary files as well as text files. Text files contain messages and information. Executable software programs are typical binary files. Binary files must be UU encoded to prevent file corruption during transmission. (See page 21 for more on UU encoding.)

4. FTP

The "File Transfer Protocol" (FTP) is the protocol used between the systems that exchange files. For example, you might see an address like this:

ftp://eddie.mit.edu/pub/hp95lx/

The "ftp" in the above address indicates that the File Transfer Protocol will be used for communications. The rest of the address indicates the exact location where a specific file is on the world-wide "library" of the Internet. This information lets you make an FTP request to access not only text files, but great freeware and shareware programs for all sorts of computer systems.

The only problem with this world-wide library is that there are no librarians around to help you find what you need. This sometimes makes it difficult to know where to look when searching for something specific.

Most systems on the Internet have the potential for serving FTP requests. All it requires is that the administrator of a particular system lets the outside world access (parts of) the disks and directories of files on the computer.

To access a FTP library you have to know which system has the file you want, the directory in which the file can be found, and the name of the file. If you know all of the above what you do is:

1. Connect to the system.
2. Log on as a guest (using 'anonymous' as user name and your e-mail address as password.
3. Ask the system to transfer the file to your machine.

If you have access to e-mail, but not FTP, you can still make use of FTP. Some systems allow you to send e-mail requesting that the file you're interested in be sent to you. One such service is FTPmail, pro-

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5. Telnet
Telnetting allows you to connect to someone else's computer anywhere on the Internet, log in, and make use of the programs that are available on that system.

To use Telnet you need to know the name of the system you wish to connect to. Additionally, you'll need a valid username and password to log onto that system. Some systems have public accounts that allow anyone to log on. Others require you to open an individual account (i.e., CompuServe).

Accessing Internet services from the HP Palmtop

All of the important Internet services described above can be accessed from the HP Palmtop.

1. Accessing e-mail from the Palmtop

UQWK and
Qua!-LX (QUALX13.ZIP 🖫)
The Palmtop's built-in cc:Mail has little practical value for most Palmtop users since it requires a dial-up cc:Mail post office. However, H. Shrikumar of the University of Massachusetts has written a program called Qua!-LX that lets you make use of the cc:Mail program on the Palmtop to access the Unix Mail system. It requires that you are able to run a program called UQWK on the host system and that you have a shell account. Either the user or the independent service provider must install it on the host system. Then the user can access it.

The way it works is that you use UQWK on the host Unix system to format the mail messages for your Palmtop. Then you use Kermit, Zmodem or another terminal emulator to download them to your Palmtop. Finally, you run Qua!-LX, which in turn will convert the UQWK files into a format that can be used by the cc:Mail program. Qua!-LX will also convert cc:Mail messages into UQWK format for uploading to the Unix host.

Qua-LX! is a freeware program that can be found in the following location:

Internet:

ftp://eddie.mit.edu/
pub/hp95lx/NEW/qualx13.zip

palmtop.com
As described above, you cannot access the Internet with the built-in cc:Mail program. However, a California company called palmtop.com has overcome that obstacle. What they do is to provide their customers with a cc:Mail post office, which functions as a relay to Internet mail. palmtop.com can only be accessed through a telephone number in California, USA. The dialing and login sequence is set up in cc:Mail.

Internet Suites
A "suite" is a single program that combines a group of different applications. A common example is Microsoft Works, a suite that combines a word processor, a spreadsheet, a database, etc. A number of Internet suites are available that let you access e-mail and the other important Internet services from the HP Palmtop. For more information on these suites, see pages 19-20. For information on setting up and using Net-Tamer, one of these programs, see pages 22-23.

2. Accessing the World Wide Web from the HP Palmtop

On the World Wide Web documents are written in HyperText Markup Language (HTML). You can download those documents to the host system and then download them to your Palmtop using WWWmail (see below). Then you can view them on your Palmtop using an HTML viewer.

HTML Viewer (HV 🖫)
Andreas Garzotto has written a program that will let you read HTML documents on the Palmtop. It will not access the World Wide Web itself, but once you've downloaded the HTML document to your Palmtop, can read them on the Palmtop with this program.

Internet:

ftp://eddie.mit.edu/pub/hp95x/NEW/hv.zip

CompuServe:

HP Handhelds 100/200LX HV.ZIP

DosLynx (DOSLYNX.ZIP 🖫)
This DOS-based Web browser was written by Garrett Arch Blythe for the University of Kansas and designed to provide support for as many DOS users as possible. Its modest system requirements allows for its usage on the HP Palmtop.

DosLynx allows access to the following type of Uniform Resource Locators, including: file, ftp, gopher, http, news and wais. To use DosLynx on the Palmtop you need a SLIP or PPP connection. For PPP connections, DosLynx only works with EtherPPP.

Internet:

ftp://ftp2.cc.ukans.edu/pub/WWW/DosLynx/

CompuServe:

Internet New Users /
CIS Dial PPP PCs / DOSLYNX.ZIP

WWWMail
For those with access to e-mail, but no WWW access, it is still possible to download information from the World Wide Web. The way it works is that you send an e-mail message to a special WWWMAIL account requesting the WWW pages you desire. The downside of this approach is that you still need a way to find out what it is you want and where it is on the Web.

Sometimes that information is furnished at the end of an article, or in a note someone sends you.

Below are some e-mail addresses you can use to request Web pages:

agora@dna.affrc.go.jp (Japan)
agora@kamakura.mss.co.jp (Japan)
agora@info.lanic.utexas.edu (USA)
agora@mx.nsu.nsk.su (Russia ONLY)
agora@www.undp.org (Restricted to developing countries)

You send mail to a specific e-mail address (the subject is ignored). For example, to request WWW pages from Shier Systems, Inc., you would send:

send
send http://www.shier.com/
source http://www.shier.com/
deep http://www.shier.com/

The first lines gives you a help file. The second line gives you a text version of the HTML document. The third line gives you the HTML code itself (which can be viewed from an HTML reader). The fourth line gives you a text file of the home page and all pages it references.

3. Accessing Newsgroups from the HP Palmtop

Qua!-LX
(See UQWK and Qua!-LX above) This program can also be used to read News offline, but because cc:Mail slows down when you have many messages in the inbox, I do not recommend using Qua!-LX for this purpose.

TNR (TNR105.ZIP) **and PNR** (PNRV10.ZIP) Tiny News Reader and Palmtop News Reader are both offline readers that rely on using the UQWK method described earlier. They are written by Michael J. Leaver. PNR is System Manager compliant, while TNR is designed specifically to run on the HP Palmtop and other old and/or slow systems.

Internet:

ftp://eddie.mit.com/pub/hp95x/NEW/pnrv10.zip

ftp://eddie.mit.com/pub/hp95x/NEW/tnr105.zip

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4. Using FTPs with the HP Palmtop

When using a shell account with a service provider, you will have to copy files from the FTP archives in two steps. First you copy the file(s) to your service provider's host computer using the FTP protocol. Then you use the Palmtop's terminal emulator (Datacomm or third party software) to download the file to the Palmtop.

5. Accessing Telnet from the HP Palmtop

As mentioned earlier, Telnet lets you connect to another computer on the Internet and run programs on that computer or access its data files. The necessary software is run on your service provider's host and the system you are telnetting to. You are using the Palmtop simply as a terminal (via Datacomm or another emulator) to connect up to the service provider's host.

Internet Suites allowing IP connections via the HP Palmtop

A "suite" is a single program that combines a group of different

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applications (see pages 22-23 for examples of using suites on the Palmtop). A number of Internet suites are available that let you access e-mail and the other important Internet services from the HP Palmtop. The following Internet suites work with the HP Palmtop:

Minuet (in INETDOS.EXE 💾)
The "Minnesota INternet User's Essential Tool" is a DOS application that combines the following Internet functions into one integrated package: POP mail client, Gopher+ client, Telnet, FPT, NetNews reader and WWW browser.

Internet:

ftp://minuet.micro.umn.edu/pub/minuet/minuarc.exe

Net-Tamer (N103-PT.ZIP 💾)
This suite, written by David Colston, is the most popular among Palmtop users. It provides the five internet functions mentioned earlier and works with PPP connections. Unlike DosLynx and MINUET, it does not require additional programs for setting up the connection, since it has built-in support for this. There is a special version available for the Palmtop, which has been optimized for the limited hardware.

Internet:

ftp://wuarchive.wustl.edu/pub/MSDOS_UPLOADS/internet/n103-pt.zip

CompuServe:

HPHAND/Lib.9/NETTAMER.ZIP

Accessing the Internet via the CompuServe Information System

Many Palmtop users are familiar with CompuServe, the home of the HPHAND Forum which supports the HP Palmtops. CompuServe is a commercial network which also offers a "gateway" to Internet, allowing CompuServe subscribers some access to Internet's resources.

CompuServe is a world-wide network and can be accessed through local phone numbers in a large number of cities around the world. It is thus ideal for very mobile Palmtop users.

Once connected to CompuServe the subscriber will either use a VT emulator or CompuServe's proprietary Host-Micro Interface (HMI) which is supported on different platforms including DOS systems, such as the Palmtop.

CompuServe also offers true Internet connectivity using PPP.

1. Sending and receiving e-mail via the CompuServe/ Internet connection.

acCIS
The most popular application for accessing CompuServe with the Palmtop is a commercial program called acCIS. acCIS is System Manager compliant and while it is designed for accessing CompuServe internal mail and discussion forums the gateway allows CompuServe subscribers to write and receive Internet mail. acCIS is written by Thomas Rundel and Ernst Abresch.

acCIS is available from Shier Systems in the U.S. and Rundel Datentechnick elsewhere (see product index at the end of this article).

2. Accessing the WWW via the CompuServe/Internet connection

The Web can be accessed with the DosLynx browser or the Internet suites mentioned earlier on this page.

3. Accessing Newsgroups via the CompuServe/Internet connection

acCIS/Usenetac
CompuServe subscribers that use acCIS, can install the acCIS add-on USENETAC 💾, which will allow them to read Usenet Newsgroups and CompuServe forums using the same interface.

CompuServe:

HP HAND Lib. 12, Usenetac.zip

4. Using FTP via the CompuServe/ Internet connection.

To access the FTP archives Palmtop users can use DOSCIM, supplied by CompuServe. The program works on the Palmtop, albeit slowly.

For more information, see CompuServe Information Service in the product index at the end of article.

5. Accessing Telnet via the CompuServe/Internet connection

INETDOS (INETDOS.EXE 💾)
This package lets you use CompuServe as Internet Service Provider. It contains MINUET, and the required helper applications EtherPPP and MYIP for setting up the PPP connection. All the needed configuration settings have been made except for Username, Password, and the telephone number. With some small modifications, it is also useful for subscribers to other Internet Service Providers.

Internet:

ftp://eddie.mit.com/pub/hp95x/NEW/inetdos.exe

CompuServe:

Internet New Users Forum Using Web INETDOS.EXE

Internet Helper applications

The following applications may come in handy, when working with information on the Internet.

1. Encoding and Decoding to prevent file corruption and data loss.

Because of the "Lowest Common Denominator" nature of the Internet, sending anything other than pure text messages and files with a limited character set requires some work-arounds. In principle, only 7-bit ascii files can be sent using SMTP (Mail) and NNTP (News). Therefore, there is a need to convert files containing special characters and binary files (programs) to the 7-bit format before transmission. This is called "encoding." After the transmission of the information, it needs to be converted back to 8-bit files. This is called "decoding."

Two similar methods are employed to solve this problem: UU and MIME Encoding.

UU Encoding

Unix-to-Unix encoding is a method of converting files and messages to 7-bit ASCII, that can be sent over the Internet without damage. It requires that the sender uses a program to encode the message or file before sending it and that the receiver decodes the message after receiving it.

Several UU programs are available for the Palmtops and other DOS systems. A suitable small program is Super UUdecoder (SUUD10.ZIP) by Trevor Ryder.

Internet:

ftp://oak.oakland.edu/SimTel/msdos/decode/suud.zip

CompuServe:

Internet New Users/Using USENET/UUDVD04E.ZIP

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MIME Protocol

Multipurpose Internet Message Encoding is similar to UU Encoding, but a more sophisticated method of encoding messages. Many PC e-mail programs understand the MIME protocol and will automatically decode the files, saving the user from decoding manually.

MPack (MPACK15D.ZIP) is a program that can can code and decode files in the MIME format. It will also UU decode and encode.

Internet:

ftp://oak.oakland.edu/SimTel/msdos/decode/mpack15d.zip

CompuServe:

CIS: Internet New Users Using USENET UUDVD04E.ZIP

2. Data encryption to protect confidential information

If you're paranoid or just plain cautious, you might make everything you send via the Internet less public. To aid you in that desire Phil Zimmerman has developed **PGP** (Pretty Good Privacy), which is a highly secure public key encryption program. It can be used to encrypt your mail messages, so that only the receiver will be able to read it. It, of course, requires that he or she also uses PGP.

Please be aware that U.S. government export regulations prohibit the export and use of the U.S. version outside of the U.S. (Editor's Note: Because of this, we will not include this program on the *HP Palmtop Paper ON DISK.*)

Internet:

ftp://net-dist.mit.edu/pub/PGP for US use only

Internet:

ftp://ftp.ifi.uio.no/pgp/pc/msdos for non-US use

Connecting the Palmtop to the Internet using PPP

When a Palmtop is part of the Internet (if only temporarily) some vital information is needed in order for the different Internet services to work correctly. This information should be given to you by the Internet Service Provider when you first get your account.

When you have the information, feed it into the Internet application that you run on the Palmtop.

The following sections will describe the information the user needs to input to the Internet program he or she is using, and gives some practical examples using the SLIP/PPP programs.

Dialing and Logon Information

Your independent service provider will give you one or more phone numbers that you can use to connect to the Internet. You'll also get a username or id, a password, and instructions on how to start up the PPP or SLIP connection once you're logged on. Often, the logon procedure can be automated by placing all of this information in a "script" file that needs to be written specifically for the individual service provider.

Mail servers (SMTP+POP3)

In order to send and receive e-mail you will need to know the name of a mail server. This is the system that your Palmtop will connect to for sending and receiving e-mail. Usually you will need to supply two names:

1. Simple Mail Transfer Protocol (SMTP) server for outgoing mail
2. Post Office Protocol (POP3) server for incoming mail.

Most of the time the same system will be used for both protocols, but they can be different. For the POP3 server you will also need to supply a username and password. Usually this is the same as your logon password, but does not have to be.

News Server (NNTP)

Since Usenet Newsgroups are placed on different news servers throughout the Internet, you'll have to tell your Palmtop which news server to use. Some service providers have their own news servers, while others don't. You'll have to ask around for a server near you.

Domain Name Server (DNS)

Each system on the Internet has its own unique Internet Protocol (IP) address. In order for you to be able to connect your Palmtop to another system, you have to know its IP addresses. Luckily you don't have to keep a huge catalog of IP address on your Palmtop. You can access a system known as a "Domain Name Server" to provide that information. However, you will need to know the IP address of the Domain Name Server to access it.

IP address

All systems on the Internet must have an IP address, including the Palmtop. Some (very few) ISPs will give you a permanent (static) IP address, in which case you'll enter this into your Internet application. However, most of the time you will be assign a temporary IP address at the time the PPP/SLIP connection is set up.

Setting up Net-Tamer on your HP Palmtop

This Internet suite is the most popular with Paltmop users. It lets you access e-mail and other Internet services from your Palmtop using a PPP connection.

Transfer the Net-Tamer files to your Palmtop and then run Net-Tamer's READER.EXE to set up the program. The first menu lets you set up your modem. When you're finished setting up the modem go to the next menu and fill out items A through I. Please note that when you enter the phone number(s) of your ISP, you will also be prompted for the file name of your login script. Depending on how your service provider is set up, you may be able to use one of the scripts supplied by Net-Tamer (see sample below). If not, the document NETTAMER .DOC has more information on writing login scripts.

Sample ISP script for connecting to CompuServe:

```
BLAST <13>
WAIT Name:-OR-#500
DELAY 20
BLAST CIS<13>
WAIT ID:-OR-#300
DELAY 10
BLAST Username$/go:ppp-
connect
WAIT word:-OR-#100
DELAY 10
BLAST Password$
WAIT PPP-OR-#300
DELAY 10
PPP
```

Minuet

This DOS program combines POP mail client, Gopher+ client, Telnet, FPT, NetNews reader and WWW browser into an integrated package that works on the HP Palmtop. The first thing you'll have to do is copy the Minuet files to your HP Palmtop. To use Minuet you first have to make a PPP connection using EtherPPP and MYIP (in INETDOS.EXE). This may be done by running a DOS batch file DIAL.BAT, similar to this:

```
set MYIP=000.000.000.000
ppp /c 1 /s 115200 /d script
myip.exe
minuet.exe/lcdmono
termin 0x60
del mincache\*.*
```

The first line above initializes the "MYIP environment variable."

The second line runs the program PPP with the following switches:

/c 1 tells PPP to use COM1: for communication.

/s 115200 sets the speed to 115200 baud.

/d script tells PPP to run the script found in the file DIAL.PPP (see below).

After the connection has been set up, the third line runs MYIP.EXE, which determines the dynamic IP address assigned to the Palmtop by the service provider and writes the address to the MYIP environment variable.

The fourth line runs MINUET.EXE, which uses the IP address in MYIP. The switch /lcdmono will run MINUET in the best possible color combination for the Palmtop.

The fifth line runs the TERMIN program, which closes down the PPP connection.

The sixth and last line deletes the cache in the subdirectory MINCACHE.

DIALING SCRIPT

The second line in DIAL.BAT above ran PPP and, among other things, accessed a "dialing script." Using CompuServe as the Internet service provider, the dialing script DIAL.PPP might look like this:

```
send "at\r"
recv 3000 "OK\r\n"
send "atdt<Access
```

```
Number>\r"
recv 30000
send "\03"
recv 30000 "ser ID:"
send "<User ID:>/GO
CIS:PPPCONNECT\r"
recv 2000 "ord:"
send "<Password>\r"
recv 10000 "PPP Connection"
send "+++"
```

Be sure to replace <Access Number>, <User ID>, and <Password> above with your information.

Once Minuet is launched, select the Setup pulldown menu to setup:

- o User Information.
- o Server Names.
- o The Name Server IP address in the Network Screen.

Unless your Internet service provider tells you to, DON'T change the Server Port numbers! (For CompuServe subscribers using the version of Minuet that comes with the INETDOS package, only the User Information needs to be changed.)

DosLynx

DosLynx also uses EtherPPP and MYIP to make a PPP connection (see Minuet above). Note, however, that in order for DosLynx to automatically use a dynamically assigned IP address, MYIP will have to be version 2.0 or higher, since this version introduced an enhancement for use with DosLynx.

As with Minuet the connection is set up by running a DOS batch file DIAL.BAT, similar to this:

```
ppp /c 1 /s 115200 /d script
myip.exe/d
mode bw80
doslynx
termin 0x60
```

The first line above runs the program PPP with the following switches:

/c 1 tells PPP to use COM1: for communication.

/s 115200 sets the speed to 115200 baud.

/d script tells PPP to run the script found in the file DIAL.PPP (see below).

After the connection has been set up using PPP, the second line runs MYIP.EXE to determine which dynamic IP address the Palmtop has been assigned by the ISP. MYIP.EXE is run with the switch /D so that it will write this address to a configuration file named MY_IP.CFG.

The third line issues the MODE BW80 command, which runs DOSLYNX in the best possible color combination for the Palmtop.

The fourth line runs DOSLYNX.

The fifth line runs the TERMIN program, which closes down the PPP connection.

Using CompuServe as ISP the dialing script DIAL.PPP might look like this:

```
send "at\r"
recv 3000 "OK\r\n"
send "atdt<Access
Number>\r"
recv 30000
send "\03"
recv 30000 "ser ID:"
send "<User ID>/GO
CIS:PPPCONNECT\r"
recv 2000 "ord:"
send "<Password>\r"
recv 10000 "PPP Connection"
send "+++"
```

Be sure to replace <Access Number>, <User ID>, and <Password> above with your information.

Before DosLynx is run, the configuration file DOSLYNX.CFG must be edited. Replace the "nameserver" and "nntphost" fields with the information obtained from your Internet service provider. In addition, the "my_ip" field in DOSLYNX .CFG must be commented out and the "include" field set to MY_IP.CFG, which is the file that has the IP address obtained from the MYIP.EXE program.

Contact Information for products mentioned in this article

All prices are manufacturer's suggested retail price. It may be possible to purchase the product for less at third-party vendors.

acCIS — $79 (see ad, page 3)
Automate CompuServe message retrieval on your HP Palmtop.
Contact: *Shier Systems & Software; Phone: 805-371-9391; Fax: 805-371-9454; E-mail: 75777.2477@compuserve.com; Online: http://www.shier.com.*

CompuServe Information System — $varies
Online information system. Home of HP Handheld forum for HP Palmtop users.
Contact: *CompuServe; Phone: 800-848-8199 or 614-457-0802; Fax: 614-529-9463.*

EXP ThinFax — $119 (see EXP display ad, inside front cover).
Contact: *EXPComputer; Phone: 800-EXP-6922 ext. 641 or 714-453-1020; Fax: 714-453-1319.*

Internet Service Provider — $varies,
(Monthly subscription fee. May include connection fee.)
Contact: *Check local yellow pages for ISP near you.*

Megahertz XJACK Modem — $varies (see ACE display ad, center spread).
Contact: *ACE Technologies, Phone: 800-825-9977 or 408-734-0100; Fax: 408-734-3344.*

palmtop.com — $varies
Provides cc:Mail post office for Palmtop users.
Contact: palmtop.com; *Phone: 408-450-3467; Fax: 408-321-3603; E-mail: admin@palmtop.com.*

RadioMail — $varies (see display ad, inside back cover of this issue)
Contact: *RadioMail; Phone: 800-597-6245 dept. NT3; E-mail: info@radiomail.net; Online: http://www.radiomail.net.*

Silicom PC Card LAN 10Base T Adapter — $149.95
CONTACT: *Silicom, USA; Phone: 206-882-7995; Fax: 206-882-4775.* or *Silicom Ltd., ISRAEL; Phone: 972-9-7678989; Fax: 972-9-7651977.*

Smart Modem Data/Fax Modem & Memory — $varies
Contact: *Apex Data, Phone: 800-841-2729; Fax: 510-416-0909.*

Shareware/freeware mentioned in this article

Shareware/freeware mentioned in this article and available on the HP Palmtop Paper ON DISK is indicated in the article by an ON DISK icon (💾) next to the program name. If the program is available online, the Internet and CompuServe locations are indicated in the article after the description of the software. A comprehensive listing of the other software on this issue's HP Palmtop Paper ON DISK can be found on page 60 of this issue.

Two-disk ON DISK this issue

Because of the amount of shareware/freeware mentioned in this article and the following CompuServe article, we will be sending two 1.44 MB disk to ON DISK subscribers instead of one. The second "Getting Online" disk will include the Internet and CompuServe related programs. For more on the HP Palmtop Paper ON DISK, see page 8.

Tapping the Treasures of CompuServe

Many HP Palmtop Paper subscribers happily "surf" the CompuServe Information Service, getting quick answers to their Palmtop questions and downloading inexpensive or free Palmtop software.

By Mark Scardina

Even though the HP Palmtop was originally designed as a Electronic Organizer and Lotus Companion, its enduring strength has been its DOS compatibility. The **HP Handheld Forum** on **CompuServe** and its members have created a rich library of applications and utilities which with the bilit-in applications make the HP Palmtop an indispensable companion.

CompuServe is an electronic information service for over 4 million people worldwide. Not only does it provide access to weather, stocks, news, and many informational databases, but there are over 800 special interest Forums. These are special meeting areas where members of like interest can exchange messages and files on a specific subject. Forums cover such interests as pets, hobbies, politics, and computer hardware and software support. It even provides a gateway to the Internet including the World Wide Web and Newsgroups. In addition, CompuServe can act as your in-home software store with the introduction of Software-on-the-Go. More on that later. Let's take a look at the home of Palmtop users on CompuServe, the HPHand forum.

CompuServe's HP Handheld Forum

Once you have logged onto CompuServe (as described later) you can reach the HP Handheld Forum by typing **GO HPHAND**. This takes you to our New Member screen, if you have never visited us before. You'll be given a brief rundown of the mission of the Forum and asked to join. Joining means you hve access to all areas in HPHAND, but does not obligate or commit you in any way. So go ahead and join us inside!

The HP Handheld Forum is a user run and supported forum. It is not managed or operated by HP. While there are many fine vendor run Forums, we feel that our unique combination of independence and excellent access to HP resources provides a great combination of helpful advice, frankness, and creative solutions for our members.

Once on HPHAND you'll find that like other forums, it is divided into three areas: the Message Area, the Library Area, and the Conference Area. These areas are additionally sub-divided into Sections which help you locate a specific topic. (See the sidebar for the HPHAND Sections on page 26.)

THE MESSAGE AREA

This area allows you to post questions, answers, comments, etc., under different Subject headings. Messages and their replies are organized by CompuServe in "threads," allowing any member to follow the entire exchange on one topic in sequence. While up to 10K of text can be posted in a message, the average is less than 1K. Our Forum is considered one of the more active ones with an average of 300 messages a day being posted. Fortunately, the Section arrangement coupled with the ability to download specific threads allow you to capture only those subjects that interest you.

Besides having sections devoted to supporting the different HP calculators and Palmtops, we have two

ABOUT THE AUTHOR

Mark Scardina is Director of Technical Marketing for ACE Technologies. He is also Sysop (Forum manager) of the HP Handhelds and OmniBook Forums on CompuServe. You can contact Mark on CompuServe at [76711,732].

additional sections that you may be interested in. The FIRESIDE section, 13, is an informal area where the only requirement is an interest in HP handhelds. It is where members can discuss almost any topic. Recent threads have included a discussion of Microsoft's attempt to purchase of Intuit, notable restaurants in cities around the world, meeting bears in the wilderness and E-TEXTS, electronic books that you can read on your Palmtop.

For the more technically inclined we have Section 15: Programming. This area allows those members interested in programming on or for the Palmtops to get advice and help, whether they work in C, BASIC, Assembly or even the Lotus 1-2-3 Macro language. One very interesting project, PAL, that is currently going on is the joint development of a C library that allows you to port or create a DOS application that has the look and feel of the built-in applications.

THE LIBRARY AREA

This area mirrors the Message Area's Section layout. It is where we keep Palmtop-related files that have been made available by HP and our members. These can be informational, such as 200LX.ANN, which is the press release on the 200LX; free utilities, such as BAT100 .ZIP, a battery information utility; shareware programs such as BUDDY.ZIP, a feature enhancement program for your HP 100/200LX; or a demo program of a commercial product such as MAGDEM.ZIP, which demonstrates the features of Magnify!, a pop-up software magnifying lens.

THE CONFERENCE AREA

This area is used occasionally to hold live discussions with a specific guest that is of interest to the Forum members. Some Forums use this as a 'chat' area as well. It allows members to exchange messages with others in real time. Guests can range from actual HP engineers to software and hardware third party vendors.

Software-on-the-Go: Commercial packages online

While there are many useful offerings in the HPHAND libraries, there are also numerous commercial applications that have been written for or run on the HP Palmtop. Unfortunately, finding these and purchasing them are not easy tasks as they do not populate the store shelves of computer stores. Software-on-the-Go is a new concept in software distribution that allows you to purchase full applications and utilities by simply downloading them. Purchases are

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Sections in HPHAND

The following Palmtop-related sections are available in the CompuServe's HPHAND Forum:

1. General — messages that don't fall into other sections or about using the forum.
2. 1x/2x/3x calcs — messages about HP business calculators (12C, 19BII, etc.)..
3. 4x/6x/7x/9x calcs — messages about HP scientific and engineering calculators.
4. OmniGo100 New Users — messages about learning to use the OmniGo organizer.
5. OmniGo100 General — messages that don't fit in other OmniGo organizer sections.
6. OmniGo700 General — messages that cover the use of the OmniGo 700.
7. 95LX General — messages covering the use of the 95LX.
8. 100/200LX New Users — messages about learning to use the HP 100/200LX.
9. 100/200LX Datacomm— messages about the 100/200LX Datacomm application.
10. 100/200LX Hardware — messages about 100/200LX hardware.
11. 100/200LX General — messages that don't fall into the other 100/200LX sections.
12. acCIS Support — messages supporting acCIS, the CompuServe access program for the HP Palmtops.
13. HPHAND Fireside — informal area where members can discuss almost any topic.
14. HPHAND Vendors — messages/information relating to third party products for the HP Palmtops.
15. Palmtop programmers — messages for those interested in programming the HP Palmtop.
16. Palmtop developers — messages for those developing products for the HP Palmtops.
20. HPHAND Francais
21. HPHAND Deutsch

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SALES: 910-545-9797
FAX: 910-545-9783
CIS: 76570,3455

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simply included on your monthly CompuServe bill with no concern whether the software originates in one country and you are in another.

Each product is complete and ready to run without the need to get special passwords or numbers. Each electronic package includes the application/utility, installation instructions, a User Manual in ASCII text format and in Adobe Acrobat PDF Format. The choice of the PDF Format means that you can print or view a fully formatted manual from any PC whether it runs DOS, Windows, Unix or is a Macintosh. The free Reader software to do this is available from the Internet (www .adobe.com) or from CompuServe in the HPHAND Forum. (The following Reader software files are found in HPHAND General Library 1: ACRORE.EXE for Windows; ACRORE.MAC for Macintosh; ARDOS1.EXE and ARDOS2 .EXE for DOS computers.)

Software-on-the-Go specializes in software for PDAs, Palmtops, Calculators, Electronic Organizers and Portable PCs. Support for the product offered is provided in the appropriate Forum for the platform on CompuServe. Many products also have demo versions located in these associated libraries for you to try out first.

By entering **GO SOFTNGO** at any prompt or by clicking the Traffic Light Icon, you are taken to the Software-on-the-Go shop door. Feel free to "step in" and browse the many "aisles" as products are arranged by category. All products have full descriptions and many have screen shots (graphic pictures) you can view if you are using CIM software. (Others may download the GIF screen shots for off-line viewing.) Don't be concerned about exploring the area. You cannot inadvertently purchase an item. Once you have made your selection you are not billed against your monthly online hours during the actual download, so shipping is free!

Ways to access CompuServe

Accessing CompuServe is quite easy thanks to the multiple modes that they maintain. This allows virtually any PC or Palmtop the ability to use the service.

ASCII OR TEXT MODE
This mode lets you log on with a simple terminal program such as DataComm on your HP Palmtop. HP makes this easier by providing a configuration file (C:_DAT\COMPUSRV.DCF) on the HP 100/200LX which you can load from DataComm by pressing [MENU] Connect Settings Open, selecting **COMPUSRV.DCF** and pressing [F10]. CompuServe has different access phone numbers dedicated to the speed of your modem (you're charged accordingly). Make

Automating CompuServe Access with acCIS

acCIS is a System-Manager complient program for your HP 95/100/200LX that automates CompuServe access, saving you time and connect charges. acCIS provides a powerful "scripting" language to simplify the process of connecting to CompuServe. acCIS lets you automate the process of downloading e-mail and Forum messages, and uploading messages composed offline in Memo or another word processor. You read and write your e-mail offline, cutting your on-line charges significantly.

acCIS lets you quick scan message headers for a particular Forum, download full threads, or retrieve personal messages only. The quick scan feature allows you to read through subject headers off-line and mark those you want to read for later retrieval.

The acCIS package comes with acCIS/SM, the System-Manager compliant version for the HP Palmtop, and acCIS/DOS, a desktop version that will run on any DOS-based computer. acCIS/SM supports 40/80 column zoom on the 100LX and 200LX, and does not require additional software to run.

acCIS 2.01 retails for $79 and is available through Shier Systems and Software. Shier Systems also bundles it with EXM Modem/flash RAM cards. For more information, contact:

U.S.A. Contact: *Shier Systems & Software, 920 Hampshire Road, Suite A, Westlake Village, CA, 91361, U.S.A.; Phone: 805-371-9391; Fax: 805-371-9454; CompuServe ID: [74777,2477].*

Europe/Asia Contact: *Rundel Datentechnik, Rappenstr. 20, 73033 Goeppingen GERMANY; Phone: +49 (07161) 14707; Fax +49 (07161); 24473. CompuServe ID: [100023,2477].*

sure you dial the number associated with your modem speed. You can call **800-848-8990** for the numbers in your area.

Key the phone number into Datacomm and dial it by pressing F10 (Connect). Datacomm will report a successful CONNECT when CompuServe answers. At this point press CTRL-C and you will be prompted for your ID and Password. (You receive these in the introductory kit that you can get by calling **800-848-8199** (ask for operator **231**) or by purchasing it at your local computer store.)

Once these have been accepted you'll be given a Menu of selections.

Moving around CompuServe is as simple as either entering the menu selection or using the GO and FIND commands. To get to the HP Handheld Forum, you enter **GO HPHAND**. By entering HELP at any prompt you get a listing of available commands and their functions. By pressing F5 (Capture) you can enter a filename and re-direct everything that appears on your screen to a file to be saved and read later. You can also type **GO PRACTICE** to access CompuServe's free practice section. You can use this section to traverse CompuServe menus, ask for help about using CompuServe, and practice until you get up to speed.

CompuServe access software

If you have a PC or Mac you can also access CompuServe with the CIM software. There is **DOSCIM** for DOS, **WINCIM** for Windows, and **MACCIM** for Macintoshes. These CIM programs are commercial software available from CompuServe. DOSCIM runs on the 100/200LX. The CIM software provides "Host Micro Interface" (HMI), which is graphical and lets you use buttons, icons and a mouse to move around the service. Many members use both ASCII and HMI software, depending on whether they are exploring or making regular forum stops to send and receive messages.

CIS navigation software

Since the Forum areas are charged at a per hour rate, it makes sense to be

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- All HP Palmtops and accessories from stock
- Sundisk, the original Flash memory cards
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able to get in and out as quickly as possible. While you can read and post messages with the REA and COM commands online, we recommend that you use one of the "navigator" programs to do this offline. These programs automatically log onto your desired Forums, capture the Subjects and/or complete message threads for you to read and reply to offline. They also automatically send any messages you've composed off line.

Several popular navigators are **TAPCIS**, **ATO**, and **ozCIS** for DOS, **CSNAV** and **ozWIN** for Windows, **Golden Compass** for OS/2, and **Navigator** for the Mac. These are all available on CompuServe online and can be found with the FIND command.

HP Palmtop owners also have the choice of **acCIS**, which will run on your HP Palmtop as a System-Compliant, Hotkey application. This program makes keeping up with all of the Forums and your E-mail quite easy because you can do it virtually anytime or anywhere (see acCIS review, in sidebar on page 27).

Getting the files in the libraries

Once you have joined us in HPHAND you have access to over 3,000 files in our libraries. (As are the messages, our libraries are arranged in sections. You can get a listing by entering LIB at the Forum ! prompt or clicking on the Books Icon in the CIM software. A complete listing of HPHAND files is found in .TXT and .GDB format in LIBDB.ZIP.)

To facilitate your finding a file, Keywords, are attached to each file. Keywords describe the type and characteristics of a file. Examples are HP100LX, UTILITY, GAME, DATABASE, PHONE, etc. You can find files that have an associated keyword by entering BRO KEY:<keyword> at any library prompt. By adding LIB:ALL to the end of this command you get a listing of all files in the Forum with that keyword. Desktop CIM users can click on the Magnifying Glass/Books Icon and enter the word.

Once you see a file that you want, you can download it to your PC or Palmtop. Desktop CIM users can simply click on the file and select Retrieve. If you are on your Palmtop using the built-in Datacomm program, you will need to enter DOW and follow the on-screen prompts. Make sure the file transfer protocol on the Palmtop matches the one CompuServe is using. In Datacomm on the HP 100/200LX, press [MENU] File Protocol and select the desired protocol.

Once you are prompted to begin the download, press [MENU] File Receive on the Palmtop and enter the name of the file.

Most files in our libraries have ZIP extensions. A "ZIPed" file has one or more files compressed into it. This saves space and makes downloading related files faster, easier and cheaper. Once you've downloaded such a file, you need to "unZIP" (decompress) it with PKUNZIP (archived in PK204G.EXE) or a similar utility.

Palmtop members have much more than the HPHAND Forum to attract them. Many users use CIS Mail as a gateway to their corporate E-mail systems. This is because they can usually call up a local CompuServe number (node) and send and receive messages wherever they are. Using CompuServe to get your business E-mail would make it possible to handle it on your morning commute, improving your productivity.

Services offered by CompuServe

CompuServe's Standard Plan Service costs $9.95 per month and gives you 5 free hours (10 for the first month) of News, Sports, Weather, E-mail, Reference Libraries, Shopping, some Financial Information, Travel & Leisure information, Entertainment & Games, Forums, and Internet access. Additional hours are then $2.95 each.

The Super Value Plan provides a total of 20 free hours for $24.95 a month with additional hours billed at $1.95 each.

Shareware Registration, SWREG, and Software-on-the-Go purchases are automatically included in your monthly bill for ease of payment.

Pricing and Contact Information for products mentioned in this article

All prices are manufacturer's suggested retail price. It may be possible to purchase the product for less at third-party vendors.

CompuServe Information Service Introductory kit — $free
Contact: CompuServe; Phone: **800-848-8199** (ask for operator **231**). Also available at computer retailers for a modest fee. International users should contact the CompuServe number in their area. The operator at the above number can help you find a local CompuServe number.

acCIS 2.01 — $79
Contact: See acCIS sidebar, page 27.

Shareware/freeware mentioned in this article

200LX.ANN — Press release on the HP 200LX. Freeware; Nov/Dec 94 ON DISK; HPHAND, Lib 11.

BAT100.ZIP — Reports status of HP Paltmop batteries. Freeware, Best Tips 96 ON DISK; HPHAND, Lib 11.

BUDDY.ZIP — Adds useful features to HP Palmtop. Shareware, Best Tips 96 ON DISK, HPHAND, Lib 11.

LIBDB.ZIP — Contains list of files found in HPHAND, freeware. Available on this issue's ON DISK and HPHAND, Lib 1.

MAGDEM.ZIP — Demo of ACE Magnify! program. Demo is freeware. Nov/Dec 94 ON DISK, HPHAND, Lib 14.

PKUNZIP — Archived in PK204G.EXE, an archive utility. Shareware, PowerDisk 94/95, HPHAND, Lib 1.

ACCESSORIES FROM THE SOURCE

If You Like Your HP Palmtop...

THERE'S MORE!

CONNECTIVITY

Palmtop software for your PC*

Transfer files effortlessly between your HP 100LX or 200LX and any DOS based PC

- Run on your PC HP 100/200LX Phone, Appointment, Database, NoteTaker, and HP Calc software
- Synchronize and merge Quicken®, phone, appointment, and database files between your Palmtop and PC
- Export and import HP100/200LX phone, appointment, database, and notetaker data to and from other PC applications (using comma delimited format)

9-pin connectivity cable

Serial connectors for PC, modem, or printer

HP F1021B Connectivity Pack:
English manual, Multi-lingual software, Connectivity cable, Connectors.....$119.95 U.S. List Price

HP F1015A DOS-connectivity cable.....$24.95

HP F1023A Connectors for PC, Modem, Printer $24.95

HP F1016A Mac-connectivity cable.....$24.95

STORAGE

- Keep more data, run additional programs wherever you go by using HP Flash Disk Cards.
- Back up your vital phone, appointment, 1-2-3, Quicken, database and other palmtop files.
- Plug your HP PCMCIA flash card into the Palmtop and it works just like a hard disk.
- Double the storage space of your HP Flash Disk Card — Stacker automatic compression software comes preloaded!

		U.S. List Price
HP F1024A	**1.8-MB** Flash Disk Card ....*New!*.....	$199
HP F1012B	**5-MB** Flash Disk Card.....	$375
HP F1013B	**10-MB** Flash Disk Card.....	$600
HP F1014B	**20-MB** Flash Disk Card.....	$999
HP F1211A	**40-MB** Flash Disk Card .....*New!*....	$1599

AC/DC ADAPTER

Extend the battery life of your HP Palmtop and charge rechargeables with this light-weight adapter.
HP F1011A .....$39.95 U.S. List Price
OPTION ABA (U.S., CANADA, JAPAN), OPTION ABB (EUROPE), OPTION ABG (AUSTRALIA), OPTION ABU (UK), OPTION ACQ (SOUTH AFRICA)

See your local HP Palmtop dealer, or contact one of the HP Palmtop advertisers in this issue. (In the U.S., obtain a dealer list by calling 800-443-1254.)

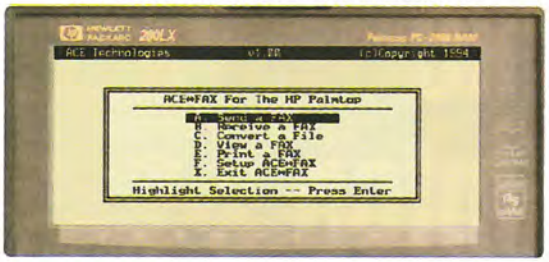
HEWLETT® PACKARD

*Requires DOS-based PC with EGA or higher display, available serial port, 3-MB available of local hard disk space, 286 or higher CPU, 450K available conventional memory, 1.44 MB 3.5 inch flexible disk drive. Quicken is a registered trademark of Intuit, Inc.

Palmtop Accessories

ACE↔FAX

HP 100/200LX Send/Receive Fax Software



- ✓ Send, Receive, View and Print Faxes on your HP Palmtop
- ✓ Full installation in less than 200k of disk space
- ✓ Requires *as little as 30KB* on C: drive for modem card users
- ✓ Auto installation program included

ACE↔FAX

Megahertz XJACK System

- ✓ HP 100/200LX compatible
- ✓ Pop-out telephone connection
- ✓ No external phone adapters
- ✓ Easiest way to send faxes

Direct Serial to Parallel Cable

- ✓ Connect to any parallel printer
- ✓ DIRECTcable version connects to HP Palmtop with no other cable required
- ✓ Powered by printer, no batteries
- ✓ Plug and play operation

Lower Prices!

ACE↔FAX for HP 100/200LX	*$29*
ACE 14.4K Fax Modem with ACE↔FAX	*$89*
XJACK 14.4K/14.4K Fax/modem + ACE↔FAX	*$119*
ModemSaver (Test unknown modem jacks)	*$29*
CableCard (8ft phone cable in pocket card case)	*$10*
External 14.4K Pocket/Fax Modem + Direct cable	*$249*
Serial to Parallel Cable (requires HP serial cable)	*$79*
Serial to Parallel DIRECTcable (no other cable required)	*$89*
Pentax PocketJet Printer with DIRECTcable	*$459*
Pentax PocketJet DIRECTcable for HP Palmtop	*$39*

HP Carrying Cases

Custom Black Nylon case	*$19*
Custom Black Leather case (shown)	*$34*
Deluxe Black Leather case (shown)	*$44*
Executive Black Leather Portfolio	*$54*

New Prices!

Your Complete HP Porta

200LX Systems with DoubleFlash⊕Plus

Available only from ACE, this complete package contains everything that you will need to start enjoying the full benefits of the HP 200LX!

- ✓ ACE↔LINK file transfer software with HP-PC serial cable
- ✓ DoubleFlash⊕Plus hi-performance storage card
- ✓ BATTman 2.0 + Two 1100mAH high capacity NiMH batteries
- ✓ AppMAN! gives you complete control of DOS applications
- ✓ HP world-wide universal AC adapter

200LX 1MB Systems with DoubleFlash⊕Plus

6M (up to 6MB)	*$799*
10M (up to 10MB)	*$869*
20M (up to 20MB)	*$999*
40M (up to 40MB)	*$1,239*
80M (up to 80MB)	*$1,789*

HP 200LX Basic Systems

Lower Prices!

1MB with AppMAN!	*$499*
1MB with ACE↔LINK, PC Serial cable, and AppMan!	*$519*
2MB with AppMAN!	*$649*
2MB with ACE↔LINK, PC Serial cable, and AppMan!	*$669*

ACE Softwa

ACE↔LINK

The simplest file transfer program for your 100/200LX

- ✓ No Palmtop Software to download
- ✓ Use **FILER** to view and exchange files with your PC
- ✓ Connects at speeds up to 115K
- ✓ No installation - Can run from a floppy

ACE↔LINK with serial cable (C1260)	*$39*

BATTman *version 2.0*

Battery Management Software for HP 100/200LX

- ✓ Use NiMH, NiCd, Alkaline or Lithium batteries in your HP Palmtop
- ✓ Predictive algorithm prevents loss of your valuable data.

BATTman 2.0 Battery Management Software	*$39*
BATTman 2.0 with 2 NiMH 1100mAH batteries	*$49*
BATTman 2.0 with 4 NiMH 1100mAH batteries & charger	*$89*
NiMH Battery Charger (4 AA capacity)	*$39*
Two 1100mAH NiMH rechargeable batteries (AA size)	*$15*

ABLE COMPUTING SOLUTION

OMNIGO

New! OmniGo 100

HP's first combination Pen and Keyboard Organizer Plus.

OmniGo 100 Organizer Plus	***$329***
F1311A PC Connectivity Pack with cable	*$109*
F1312A Clip and Go	*$67*
F1313A Strategy Games	*$47*
F1314A Replacement Pens (3 pack)	*$9.99*
GEN-PENS2 ACE Pen and Stylus (combo pen)	*$11.95*
GEN-PENS2D ACE Deluxe Pen & Stylus (Mont Blanc like)	*$24.95*
GEN-PENS3 ACE Deluxe Pen, Pencil & Stylus (Tri-pen)	*$39.95*
GEN-A1015A OmniGo Serial Cable	*$19*
GEN-SPDIR Serial to Parallel DIRECTcable Converter	*$89*
PCMCIA SRAM Storage Cards New Prices!	
A1003 512KB ACEcard	*$89*
A1004 1MB ACEcard	*$139*
A1006 2MB ACEcard	*$249*

RE SOLUTIONS

Magnify! version1.1

HP 100/200LX Software Magnifying Lens

Our Best Seller!

Adjustable sizes 1X, 2X, 3X and 4X

Move lens with cursor keys

- ✓ Pop-Up magnification from 1X to 4X
- ✓ Hotkey activation in any Built-in Application
- ✓ Auto alignment with lines and columns in Phone Book
- ✓ Remembers and returns to last position in each application
- ✓ Move Lens with Quick Keys and Arrow Keys

Magnify! (C1240) for HP 100/200LX..... $19

*** MEMORY UPGRADE ***

5MB

NEW

New! RAM+Plus

5MB memory upgrade for your HP 200LX!

With ACE RAM+Plus memory upgrade, you will have over 4.3MB of internal storage plus 640K of Program Memory.

Features

- ✔ Expands your internal C: drive to over 4.3MB
- ✔ Ultra-low power static RAM design for excellent battery life
- ✔ Included software allows RAM+Plus to be used as EMS memory
- ✔ Perfect for use with FAX modem cards - you can now receive and store your faxes on your HP 200LX
- ✔ Use with Software Carousel(tm) to run multiple DOS programs simultaneously with System Manager
- ✔ Compressible with ACE DoubleRAM software to over 8MB!
- ✔ Price includes installation by ACE

RAM+Plus Memory Upgrade HP200-RAM4 ..... ***$495***

(RAM+Plus not available for 95LX or 100LX)

NEW!

5MB 200LX

ACE Technologies Exclusive!

Available only from ACE - 5MB HP 200LX. With ACE RAM+Plus factory installed, you will have 640K of Program Memory and over 4.3MB of internal storage. Includes One Year Warranty from ACE.

RAM+Plus Memory Upgrade HP200-RAM4 ..... ***$995***

RAM+Plus is exclusively designed and manufactured in Japan by FTL Ltd.

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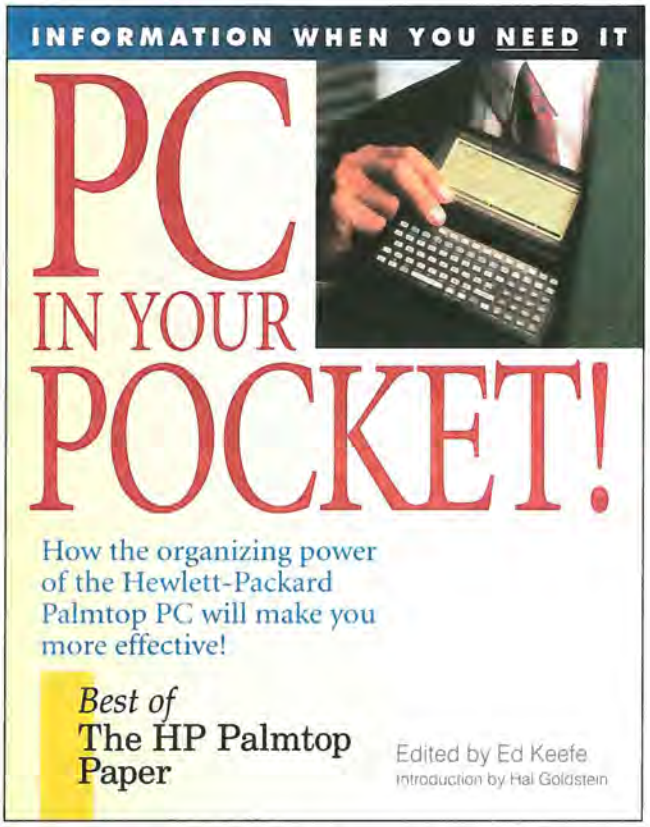
User to User

Learn more about your HP Palmtop and meet fellow users, developers, and vendors at the HP Handheld Conference; Best of the HP Palmtop Paper in the new book: PC In Your Pocket.

By Hal Goldstein


INFORMATION WHEN YOU NEED IT
PC
IN YOUR
POCKET!
How the organizing power of the Hewlett-Packard Palmtop PC will make you more effective!
Best of
The HP Palmtop Paper
Edited by Ed Keefe
Introduction by Hal Goldstein

PC In Your Pocket, a new book from the publishers of *The HP Palmtop Paper*.

The HP Handheld users conference in Anaheim, California, U.S.A. August 24 & 25, 1996

The HP Handheld users conference held in Minnesota last year was great. The talks and the people were fun and stimulating. Top HP personnel plus representatives from Thaddeus Computing (that's us), Global Connections, EduCALC, Shier systems and others were available to give talks, say hello, and demo their products.

This informal conference has a long history — a history almost as long as HP has provided us with innovative, useful handheld products. Volunteers typically devote many hours to putting together the talks and to organizing a comfortable facility.

This year's conference promises to have many useful sessions on HP Palmtops, on the OmniGo 100, and on HP Calculators both for technical and non-technical users. EduCALC and other vendors will continue the tradition of giving away lots of door prizes at the end of the show.

David Shier and Avi Meshar of Shier Systems and Richard Nelson of EduCALC have taken the lead organizing the conference. It will be held at the Marriott Hotel in Anaheim near Disneyland. (That means you can finally justify your interest in the Palmtop to your family by rewarding them with Disneyland right before school starts.)

Kheng Joo Khaw, the head of the HP Handheld division in Singapore will be the keynote speaker. Khaw is extremely open to feedback and to talking with users and developers. Expect to meet others from Hewlett-Packard as well as many vendors of HP Palmtop products.

If you are interested in giving a talk or demonstrating a product, or if you have input as to what you want to see at the conference, contact David at **805-371-9391** or Richard at **714-582-2637 ext 106**, or visit the conference web page at **http:// www .shier.com/~hhc96**. For more information and registration information, see the sidebar on page 33.

I look forward to seeing you there.

PC in your Pocket

As a reader of *The HP Palmtop Paper*, you more than anyone know the value of having your Palmtop always available. Many users have been frustrated and surprised why more people haven't heard about the Palmtop and why more aren't using it. Hopefully, we've come up with a partial solution.

For almost five years this publication has profiled users, reviewed products, and provided tips and techniques. We decided to take some of the best of that material, condense it, and tell the story of Palmtop computing in an easily accessible, easy-to-read book about the Palmtop.

Regular columnist Ed Keefe vol-

HP Handheld '96 Conference & Show August 24 & 25, 1996

The annual HP Handheld '96 Conference and Show will be held this year on August 24 & 25 at the Anaheim Marriott Hotel, located walking distance from Disneyland in Anaheim, California, U.S.A.

The conference will include presentations and discussions on the HP Palmtops, OmniGo organizer and HP calculators. Presentations and discussions will cover general user topics as well as hardware and programming issues. In addition, the conference will feature a round table discussion that will allow conference participants to ask questions of, and give input directly to a panel of HP personnel. The vendor show that accompanies the conference will display handheld related products.

The keynote speaker will be Kheng-Joo Khaw, General Manager of HP's Asia Pacific Personal Computer Division. The Asia Pacific Personal Computer Division is responsible for designing, manufacturing and marketing all HP handheld products, ranging from high-end calculators to the HP Palmtop PCs and OmniGo organizers.

Registration prices:

Advanced — $99
At the door — $150

Registration contact:

Shier Systems & Software, 920 Hampshire Road, Suite A29, Westlake Village, CA, 91361, U.S.A.; Phone: 805-371-9391; Fax: 805-371-9454; CompuServe ID: [75030,3374].

WEB Site: *Up-to-date conference information will be maintained on the web page at http://www.shier.com/~hhc96.*

Program information contact:

Attn: Richard Nelson, EduCALC, 27953 Cabot Road, Laguna Niguel, CA 92677, USA; Phone: 714-582-2637 ext. 106.

unteered to put it together. We "borrowed" from the format (but not the awful title) of the "Dummy" and "Idiot" books to create an inviting, open, graphically interested look. We oriented the book around what people do rather than around the computer. It is written in Ed's clear and friendly easy-to-read style. You'll find excerpts from many of our most popular HP Palmtop Paper articles such our physician and Marine profiles, and our Steven Covey time management application. To give you a feeling for the book, see the sidebar containing the table of contents.

PC In Your Pocket:

How the organizing power of the Hewlett-Packard Palmtop PC will make you more effective

Edited by Ed Keefe

Listed below is the table of contents for *PC in Your Pocket.*

THE POSSIBILITIES: Overview of the HP Palmtop PC

Introduction by Hal Goldstein, *HP Palmtop Paper* publisher

Palmtop hardware and built-in applications

1. TIME: Staying organized even with too much to do

Built-in Calendar and ToDo list: *Appointment Book*

Time Management Approaches
- Long-term planning
- Steven Covey approach
- Project Management

"It's 3:00 AM in Paris:" *World Time*

Keep meetings on schedule: *Stopwatch* and *Timer*

2. INFORMATION: When you need it

From restaurants to research: *Database*

No more post-it notes: *Notetaker*

3 WORDS: Small keyboard? No problem!

Typing tricks for the tiny keyboard

Word-processing: from MS Word to *Memo*

4 MONEY: Managing finances & crunching numbers

Many uses of built-in *Lotus 1-2-3*

Recording financial transactions on the go: *Pocket Quicken*

Powerful business calculator made easy to use: *HP Calc*
- Calculator functions
- Computing loan payments in seconds
- Simple stats instantly
- Create your own equations: *HP Solver*

5 PEOPLE: A lifetime of contacts

From phone numbers to birthdays: Phone Book

Contact Management: ACT!

6 COMMUNICATIONS: Go On-line (fax and E-mail too)

Making the Connection: *cc:Mail, Datacomm*

Send messages wirelessly

The Palmtop, the Internet, and CompuServe

7 PC COMPATIBILITY: PC data, games, DOS applications

Sharing data between machines

Running *DOS* software

A reference library in your pocket

Take it easy: Read books and play games

8 ODDS AND ENDS: Storage, batteries, and much more

Organizing the organizer: *Filer*

Configuring your Palmtop: *Setup*

Storing megabytes of data

The infrared port: Transfer data, Control your TV

Keeping your data safe

A month on 2 AA's: Battery options

Programming and the Palmtop

Where to get support

9 PULLING IT ALL TOGETHER: Palmtop Profiles

Physician: This Cardiologist, awakened at 2:00 AM, uses his Palmtop to help a colleague in the ER.

Chief Financial Officer: On the road this CFO stays in touch even on a New York City park bench.

Real Estate Executive: This Director of Leasing and Acquisitions uses his Palmtop to stay organized, motivated, and informed.

10 RESOURCE GUIDE: Where to buy your Palmtop and accessories.

Other handhelds from Hewlett-Packard
- *The HP OmniGo 100 organizer:* An easy-to-use HP pen-based organizer
- *The HP OmniGo 700LX communicator.* HP Palmtop and Nokia cellular phone in one.

Products mentioned in this book

Where to buy the Palmtop and accessories

Who is the book for?

The book is intended for both Palmtop users and potential Palmtop users. As you might infer from the table of contents, we don't go into the depth that we do in *The HP Palmtop Paper*. Therefore, strong technical HP Palmtop users will not find the book meaty. What the book does is give an overview. It gives the reader an understanding of the usefulness and flexibility of having a pocket-sized computer always available by providing many real-life examples.

Palmtop users will find the book full of useful and creative ideas. The book is also ideal for friends and colleagues that you think would profit from having a Palmtop.

Where to buy the book

The book will be available this Fall in book stores or can be ordered directly from us.

It looks like the book will be aggressively distributed to all major book store chains in the U.S. We found an excellent U.S. distributor who to our pleasant surprise was quite excited to work with us. (Later we found out that the brother-in-law of one of the principals wrote a Palmtop profile for us last year!)

Subscribers can also order the book directly from us (see order card, pge 8). We ask that you have patience as to its delivery. We are planning to have the first printing completed by July, but these things have a way of taking longer than we expect.

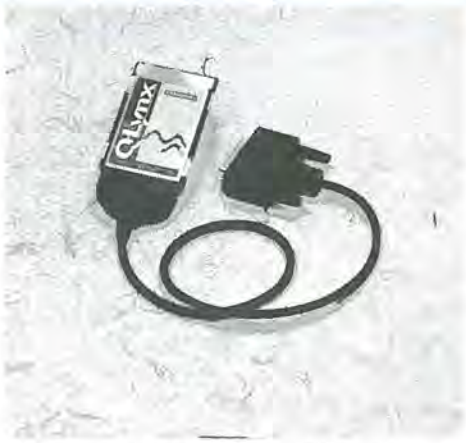
The book comes with a *The HP Palmtop Paper* subscription offer and an offer for a disk full of the freeware and shareware mentioned in the book. A free copy of the disk will be sent to subscribers who order the book directly from us.

REVIEW REVIEW REVIEW REVIEW

Add a Parallel Port to Your HP Palmtop

Slip Quatech's SPP-100 PC into your Palmtop's PC Card slot and connect directly to parallel port printers, CD-ROM drives, network adapters, Zip drives, and more.

By Craig Payne



Quatech's SPP-100 PC is a PC Card that slips into your Palmtop's card slot and adds a parallel port to your HP 100/200LX. This allows you to connect to parallel port printers, LAN adapters, ZIP drives, and more.

The great strength of the HP 100LX and 200LX Palmtops is that they are PC compatible down to the bare metal. Unfortunately, they lack one key piece of hardware that almost every other PC has — a parallel port. The Palmtop's serial port lets you connect to many printers, but adding a true parallel port to the LX would open up the machine to the wide variety of other parallel port devices that exist: CD-ROM drives, network adapters and disk drives such as the popular Iomega Zip drive for example.

Fortunately, the fact that the HP Palmtop comes with a PCMCIA (or PC Card) slot makes it possible to add a parallel port. A number of PC Card manufactures offer parallel port cards. You simply slip one of these cards in a computer's PC card slot, install the necessary software and the computer has an extra parallel port. However, until now none was found that worked with the HP Palmtop.

I examined one such card — the **SPP-100** from **Quatech**. The SPP-100 is a conventional Type II PC Card (see picture above). A detachable cable about two feet long (61 cm) comes with the card and connects to the card with a wide 27-pin connector. At the other end of the cable is a standard 25-

ABOUT THE AUTHOR

Craig works for U.S. Robotics/ Megahertz on future mobile communications devices. On the side he developes freeware and commercial software for the HP Palmtop family of computers and owns a small restaurant in Park City, Utah, U.S.A.

pin female "D" connector — the same parallel port connector you will find on the back of most PCs or laptops. The actual cable is a bit thicker than the standard HP serial cable.

What makes this particular card interesting to Palmtop users is that the manufacturer now includes with the card special software drivers designed for the HP 100/200LX.

Custom "drivers" let the card work with the HP Palmtop

Quatech provides two Palmtop-specific "drivers" with the card: SPP100CL.COM and SPP100CL .TSR. In the HP Palmtop series each class of PC Card (PC Card modems, memory cards, etc.) requires a special software program to recognize and configure that type of card. This software program is called a driver. For example, your HP 100/200LX has built into it CIC100.EXE, a driver which lets the Palmtop recognize PC Card modems.

These driver programs are DOS "Terminate-and-Stay-Resident" (TSR) programs. This means that you start them from DOS and they run in the background, doing their job without you being aware of it. In the case of the built-in CIC100.EXE, once you run it, it lurks in memory and examines PC Cards as they are inserted. When a PC Card modem is inserted, it enables and configures the card for the HP Palmtop.

Quatech's SPP100CL.COM driver enables the SPP-100 parallel port card. It occupies 1,040 bytes of RAM. Like CIC100.EXE, it is generally installed by running it from the AUTOEXEC.BAT file. Simply add the command: spp100cl to its own line in the AUTOEXEC.BAT file and whenever you reboot the Palmtop, the driver will be installed.

SPP100CL.TSR is a special "System-Manager TSR" designed for and supported only by the HP Palmtop. When System-Manager starts it automatically loads any program with an extension of ".TSR" found in the C:_DAT directory. Simply place SPP100CL.TSR in the C:_DAT directory and it is automatically installed when you start System-Manager. You only need to load this TSR if you wish to print from System-Manager applications such as Memo, PhoneBook, Appointment Book, etc. Normally, System-Manager applications print directly through the Palmtop's built-in serial port drivers. When SPP100CL.TSR is installed on the Palmtop, it intercepts a built-in application's print job and redirects it to the parallel port.

Actually, with SPP100CL.TSR installed you can switch between serial and parallel printing. Simply start the Palmtop's Setup application, press [MENU] **O**ptions **P**rinter and select **Com1** to print from the serial port or **Alternate** to print from the Quatech parallel port. SPP100CL.TSR is a small software program, using less than 500 bytes of System Ram memory when installed.

Hard reset needed to install the card

The SPP-100 was designed a few years ago and never tested in the LX series until recently. This testing revealed a painful, but not fatal flaw — the HP 100/200LX will not turn on with the card inserted. And don't try inserting this or any other PC Card with the Palmtop turned on. Such a "hot insertion" can crash the Palmtop and wipe out your SRAM C drive.

The only way to make the Quatech card work with the Palmtop is to turn the Palmtop off, insert the card, and start the Palmtop with a hard reset. A hard reset is accomplished by holding down [CTRL] and the left [SHIFT] and then pressing [ON]. Answer "**N**" for No and press [ENTER] when the Palmtop asks: "Initialize RAM Disk? Enter Y or N:" INITIALIZING THE RAM DISK WILL DESTROY ALL DATA ON YOUR C DRIVE.

With the SPP-100 card inserted you must do a hard reset each time you wish to turn on the Palmtop. Frequent hard resets are probably not harmful, but they are a bother for two reasons: First, a hard reset always resets your battery type to Alkaline. Second, a hard reset may reset the date on the Palmtop to 1/1/80.

If all you use is alkaline batteries, then you don't need to worry about resetting your battery type. If you use rechargeable NiCds, you might want to obtain a copy of BATSET.COM, a program that sets battery type on the Palmtop. You can use this to automatically configure your Palmtop for NiCds (or any other type of battery). Add **`batset /n`** to your AUTOEXEC .BAT file to automatically set your Palmtop to NiCd batteries with charging disabled. Add **`batset /c`** to set the Palmtop to NiCd batteries with charging enabled.

Is the need for the hard reset is a fatal flaw? Not in my opinion. Once the reset is done, the HP Palmtop and the card are completely functional. However, it is a flaw in an otherwise good product. I have tried to make this very clear to Quatech. No other PC Card has this problem in the Palmtop and there does not seem to be any good electrical reason for it. The SPP-100 does not draw too much power. It draws a good bit more than a SanDisk flash disk card but substantially less than a 14,400 baud modem card. In the Palmtop the PC Card bus is shared with the ROMs. I suspect that the SPP-100 is driving the bus for a brief time when it should not while powering up. The engineer responsible for the SPP-100 is looking into the problem.

What you can do with your new parallel port

Now that you have a parallel port on your HP Palmtop, what can you do with it? Well, aside from connecting up to a parallel printer, I connected my HP Palmtop to a

number of other devices, including my desktop computer, a Xircom Ethernet adapter, and an Iomega Zip drive. The only problem I had was when I tried to use the DOS 6.x programs INTERLNK and INTERSVR to transfer files between my Palmtop and desktop PC. These worked with a serial connection but not via the parallel port. This is odd as LapLink worked fine over the same parallel connection.

Printing to parallel printers

Printing to the parallel port is easy. You can run a DOS text editor like VDE and print to the parallel port by selecting LPT1 as the printer port. You can also use the DOS Copy command to send a plain ASCII text file to the parallel port. For example, lets say you wanted to print out a Memo text file named MSG1.DOC located in C:_DAT. With the SPP-100 card installed you would go to the DOS prompt and type **`copy c:\_dat\ msg1.doc lpt1`** and press ENTER.

As mentioned above, printing from System-Manager applications requires that you copy SPP100CL .TSR to C:_DAT on your Palmtop, restart System-Manager and set your printer connection to "Alternate" from Setup's Printer screen (press MENU Options Printer from Setup). Then just print as you normally would. Unfortunately, this arrangement does not work with Lotus 1-2-3. This application contains its own printer drivers that can not be bypassed. The way around this is to print your Lotus spreadsheet to a file, go to Filer and highlight this file, and then press MENU File Print.

Connecting to LAN networks

Before most laptops had PC Card slots, Xircom and other vendors offered external Ethernet and Token Ring network adapters that connected to a computer's parallel port. Eventually, PC Card network adapters were developed, but these draw their operating power from the computer into which they are inserted. Most PC Card LAN adapters do not work with the HP Palmtop.

The great advantage of the external, parallel port LAN adapters for Palmtop users is that they run from an external AC adapter and draw no power from their host. Quatech's parallel port adapter made it possible (at least theoretically) to use one of these adapters with the HP Palmtop. I decided to test one out.

I connected **Xircom's PEM-10BT** LAN adapter to my Palmtop's new parallel port and installed its standard NetWare ODI drivers on my Palmtop. In no time at all I logged into our file server and ran a utility called Net to map a networked printer to LPT1. I was able to print to the shared network printer from DOS on the Palmtop. Unfortunately, I was unable to launch System-Manager. The "100" command just gave a brief error message and returned me to the DOS prompt. Clearly the NetWare shell and System-Manager are fighting for some resource.

Adding megabytes of extra file storage

Perhaps the most interesting application for a Palmtop parallel port is to use it to add on 100 megabytes of file storage. The **Iomega Zip** drive is a compact $200 portable disk drive with removable 100 MB cartridges. Iomega has shipped more than a million of the drives and offers parallel port and SCSI models. I had no trouble connecting the parallel model to the LX. I installed on my Palmtop an Iomega DOS TSR called GUEST.EXE which uses about 27,000 bytes of memory. The Iomega files GUEST.INI and ASPIPPA3.SYS must also be copied to the Palmtop. The Zip drive appeared as drive F on my Palmtop.

To test out the speed of my Palmtop's new drive I copied the entire ROM D drive to a Zip cartridge. From the DOS prompt I keyed in the Xcopy command **`xcopy d:\ f:\ /s`** and pressed ENTER. It took 48 seconds to copy 1,001,472 bytes in 93 files. Using Filer the same copy took 54 seconds. That works out to roughly 20,864 and 18,546 bytes per second respectively. Copying a 303,947 byte file from the Zip drive to my Palmtop took 21 seconds. The same copy took 3 seconds when the Zip drive was connected to my 66 MHz 486. I believe these times can be improved

Pricing and Contact Information for products mentioned in this article

All prices are manufacturer's suggested retail price. It may be possible to purchase the product for less at third-party vendors.

Quatech SPP-100
Parallel Port PC Card — Price: $195.
Contact: *Quatech, Inc., 662 Wolf Ledges Pkwy, Akron, OH 44311, U.S.A.; Phone: 216-434-3154; Fax: 216-434-1409.*

Xircom PEM-10BT LAN adapter and modem —$389
Product discontinued but still available as long as supplies last. Contact: Xircom *Corp.; Phone: 800-438-4526 x 6965 or 805-376-6965, Fax: 805-376-9220.*

Iomega Zip Drive — Price: $239.95.
Contact: Iomega, 1821 W. Iomega Drive, Roy, UT 84067, U.S.A., Phone 800-697-8833 or 801-778-1000; Fax: 801-778-4457.

Shareware/freeware mentioned in this article

BATSET.COM — Utility that lets you reset the battery charge time on the 100/200LX. Freeware, last available on the 1995 Best Tips issue ON DISK or from CompuServe's HPHAND forum, Library 10.

VDE — VDE18 is a compact text editor and alternative to the built-in Memo application. It is shareware and is available on the Nov/Dec 95 issue ON DISK or from CompuServe's HPHAND forum, Library 7.

upon. The Iomega diagnostic program indicated that the parallel port was being used in 4-bit mode. But the SPP-100 supports Enhanced Parallel Port (EPP) mode which can transfer data 8 bits at a time. I believe that SPP100CL.COM is not enabling the card in EPP mode.

Those are the devices I was able to test with the SPP-100. A number of manufactures make parallel port CD-ROM drives. I believe these would work as well as the Zip drive does. Parallel port tape drives are also common, but it is not clear how useful it would be to connect one to the Palmtop.

The bottom line is that if you have a parallel port device that works in DOS, it should work on your Palmtop with the Quatech SPP-100 parallel port PC Card.

The "MUPs" File! The Most Unusual Places We've Used Our Palmtops

Vic Roberts and Stan Dobrowski at sea as usual, attempting to navigate with their Palmtops on Saratoga Lake.

On "le Shuttle" under the English Channel or skiing down a glacier in the Canadian Rockies, the Palmtop is with you whenever you need it — in some very unusual places!

By Linda Worthington

"Greetings from the Half Dome in Yosemite...,"

"I am sitting on the pitcher's mound...,"

"Salu from the top of Champagna da Diavolezza...."

As I was lurking in the "Fireside" section of CompuServe's HPHandheld Forum, I noticed a wide variety of personal adventures that were being documented by the Palmtoppers. Sometimes they kept journals of their travels on the Palmtop and uploaded them to CompuServe when they got home. Other times they'd use wireless transmissions or local telephone lines for on-the-spot reports from exotic places around the world (or a few blocks from home). One day I suggested to the Fireside section that it would be fun to collect some of the more unusual accounts and honor them in some form, perhaps in a poem. And so, the MUPs (Most Unusual Places) File was born.

From all over the globe have come accounts of the wonders and

ABOUT THE AUTHOR

Linda Worthington is a native New Englander, living in Maryland. She is a fly fisherman and loves hiking, photography and computing. Linda's company, LOW-TECH, is designed to help people choose and use portable computers. She also uses computers to do extensive volunteer conservation-related work for several organizations.

Linda Worthington, the author of this article, contemplates the perfection of nature and the HP Palmtop on top of a mighty comfortable looking rock in the middle of the Catoctin Mountains of Maryland, U.S.A..

the woes of travel. One traveler was at the top of an Aztec pyramid. Another was at the top of a pitcher's mound in his daughter's school playground. Alone or with families, friends and strangers; laments, laughs and lyrical flights of fancy were all captured on, and downloaded from the faithful Palmtop.

I present below some of these selections for your arm-chair travel entertainment.

Beneath the sea

"I am writing this to you from about halfway between England and France under the Channel. We are on 'le Shuttle,' the train that lets you drive your car onto the train and then drive off at the other end. Very slick...the entire trip under the Channel takes about 15 minutes..."

Ron Vieceli
E-mail: 73310.3663@compuserve.com

Offering to the sun

"A spectacular coffee break! Today was supposed to be another normal day at my office in Mexico City. We decided to take a half-a-day off and rushed to 'Teotihuacan' an Aztec city about 50 miles north from Mexico City. I am writing this e-mail from the top of the 'Sun Pyramid,' the highest pyramid in the world with 365 steps. Cheers!"

Francisco Bricio
E-mail:
74174.1442(@compuserve.com

Mountain-top coffee break

"Salu Linda, ...from the top of Champagna da Diavolezza, above the Col Bernina in the Grissons (South-Eastern Switzerland). I am sitting in the mountain top restaurant, relaxing my tired legs and sipping a cup of coffee. Around me are hundreds of tourists, speaking German, Swiss, Italian, Austrian, British English, French, and Spanish. They are all enjoying the skiing and snowboarding fun high up in the mountains (almost 3000m 10'000ft)...."

Alexandre Gutfeldt
E-mail: 100527.2461@compuserve.com

In a 747 over Moscow

"Hi Guys! Well, I'm right over Moscow, on a 747-400 on my way back to Paris. Who said long trip flights were dull? I downloaded my e-mail before boarding the plane and I'm reading it now. Many planes have screens that show the flight plan and the current location of the plane on a world map. Thanks to Buddy and WorldTime I displayed an almost identical screen on my HP Palmtop. My friend sitting next to me was astonished ...OK! Breakfast is coming. See you..."

Karim Kabbabe
E-mail: 100013.505@compuserve.com

Gilded concert hall

"Linda, this message is from the intermission at a George Winston concert. It's taking place in a lovingly restored 1920's movie theater, complete with balcony, lots of moldings, gilt and velvet tapestries..."

Ron Vieceli
E-mail: 73310.3663@compuserve.com

The Palmtop as hospital bedside comfort

"Linda, here is my MUP candidate: I am in the Emergency Room of Kaiser Hospital in Woodland Hills, California, trying to forget my pain by reading/writing messages and replies...I am passing a kidney stone..."

Avi Meshar
E-mail: 75561.633@compuserve.com

[With constant support from many Forum friends and with unfailing courage and humor, Avi passed "Roxanne" in due time, to great cheers from all.]

Bus ride to Budapest

"I am reading and replying to HPHand messages while riding on a bus from Fonyod, Hungary to Budapest, after their biggest snow storm in 10 years."

Vic Roberts
E-mail: 70413.1423@compuserve.com

Pitcher's mound pride

"I am sitting on the pitcher's mound in the middle of the school yard at my daughter's school. My son Eric (age 4-1/2) and daughter Jeanette (age 7 next month) are riding their bikes all around me. We are so proud of Jeanette because as of this week, she does not need the training wheels any more..."

Stan Dobrowski
E-mail: 76711.2302@compuserve.com

Ode to the Palmtoppers (1995)

The MUPs have brought great delight to us all . I was inspired by the first wave of entries to celebrate my wonderful wandering friends with a poem. Here is my Ode to the Palmtoppers, loving dedicated to all the folks around the Fireside.

Give me a moment, I'll tell you a tale
Of the Palmtoppers' travels, relayed by E-Mail;
By planes, trains and subways, by balloons and by cars
They sink to the depths and they shoot for the stars,

While some, more conservative, write from a chair,
But being Palmtoppers, you never know where!
Since they all were so willing to be in my file
Of Unusual Places, let's read for awhile:

Avi goes walking in sunshine and rain
To exercise legs and both sides of his brain;
He reads and he writes as he walks through the night;
He never has fallen, but I think he might!

One morning he wrote me from his Barber's chair,
A note to say someone was cutting his hair;
He also informed me, by post-script, quite soon,
That he once sent a note from a hot-air balloon;

One day, from above, in the far Friendly Skies
Came a message from Gary, who after some tries,
Had connected to CompuServe on an Airfone
And so far that honor is his, all alone.

Speaking of honors, we have to count Gilles
As a winner for numbers of Palmtopping miles:
He has traveled both coasts in our country you see,
And his messages come both by land and by sea:

From a Whalewatching Boat near Vancouver, West Coast
And from Prince Edward's Light, on the "other", Best Coast!
He travels so fast and he travels so far
That I think he has seats on his own shooting star!

To my horror I see that while Dara is driving
He reads and he writes, and though he's still surviving,
I think that he'd better beware of such mail,
Lest we next get a note from a Florida jail!

Now we look to the distance, where Daniel resides:
In France, in a fine ancient cottage he hides,
But he writes to his friends, the whole bunch of us,
From there, and from Paris, one time, on a Bus!

Now away to New Jersey, lets visit with Stan
If you want true variety, he is your man!
I heard from the deck of a New York bound Ferry,
On the way to a Roundtable; nervous? Yes, very!

The next little bon mot was sent from the table
At Expo; I do not know how he was able
To write while he answered those questions, and told
All the folks how LX's are better than gold!

If you thought that was clever, just wait, there is more:
He writes from the beach on the New Jersey shore,
And to prove my main point, that this fellow's a wag,
He is writing, he says, through a small plastic bag!

He claims that his kids like to bury him deep
In the sand, where he peacefully falls off to sleep,
But my favorite of all is the way that he tries,
With the kids, to catch bottles of bright fireflies!

Now here is the Palmtoppers' own Underground,
Where two of our friends, Steve and Tim, can be found;
Steve is in Manhattan, commuting, says he;
And Tim is in Hong Kong, and writing to me!

"From the air over Russia": this must be a fad,
For two different notes from a plane I have had:
One written by Karim, the other from Drew,
Both mailed from the ground, but I think they will do!

And here is a wonderful bit of good news:
The new little daughter at Susan and Drew's;
From China, she flew to her new Denver home
No doubt she'll send e-mail when she starts to roam!

If you find any errors, blame them on my sense
Of freedom, expressed with a Poetic License;
If this does not please you, that's fine and O.K.,
Just write your own poem and send it our way!

Linda Worthington
74452.105@compuserve.com

Island wilderness beach and the "baggie"

"I'm on the beach at Cumberland Island, Georgia, typing this message to all through a freezer baggie. I keep my Palmtop in one to protect it from the sand. The great thing about our camping site is that it is one-quarter mile from the beach. The dunes are covered with bushes and grasses so it is a wonderful wilderness."

Rob Mitchell
E-mail: 72764,3061@compuserve.com

30,000 feet up in a KC-135 tanker

"I have used my HP 200LX while flying on a Kansas Air National Guard KC-135 Tanker cruising at about 30,000 feet."

Dave Fisher
E-mail: 102711.3602@compuserve.com

Skiing on glaciers

"I and my HP have just returned from the Canadian Rockies. The snow is hard to enjoy! It has not snowed in over two weeks and what is here is wind-packed or

Joseph McSwain (shown here out of the bathtub) doesn't let soaking in a hot bathtub get in the way of his Palmtopping pleasure.

sun-crusted making it hard to ski. But on the other hand the sun is out and it is splendid that way. Had drinks at Chateau Lake Louise today, Monday, after a rough and tumble day of attempting to ski. My friends sitting here with me think I'm crazy using a Palmtop — I explained the MUP and they grudgingly acquiesced...Aha, the dataphone works — the acoustic coupler will not be employed.

Skied up to the Plain of Six Glaciers today by skiing across Lake Louise. Clear and nice when we started but visibility quickly disappeared in cloud. Today we did downhill/telemarking at Sunshine just outside of Banff. A long gondola ride up over sparse snow led to immense snow fields generally above treeline. Visibility was a problem, but you can't have it all. So while the rest of you were saying goodbye to daffodils and snow, we re-entered a world dominated by perpetual Winter. A wonderful, white world of whipped cream beauty. I will miss it, but my own bed in my own room (instead of a bunk bed in a room with six guys and damp gear strewn about) will be welcome tonight!"

Fred Kaufman
E-mail: 75162.2616@compuserve.com

Fantasy land

"I'm sitting in the Mercedes Benz dealer's showroom waiting to pick up my car! I'm ensconced in the butttersoft leather of a $75,000 Mercedes Benz passenger seat! This is indeed *the* car — mine pales in comparison! I can smell the leather, it makes me heady and ready to swoon. I calmly stroke the burlwood gearshift knob resisting the desire to switch to the driver's seat and take off from the dealer's showroom floor through the plate glass window!"

Drew Guttadore
73201.3016@compuserve.com

Skating beneath the Comet in Belgium

"Hi Linda and All: I am writing this, still gasping for some air after a wonderful in-line skate (roller blade) ride under the bright stars and the comet Hyakutake-2's fuzzy head and eerie tail. It just was magnificent! It was freezing lightly, the sky was crisp and clear, with only the sound of my skates on the deserted country-side roads. I looked up and saw Orion and its nebula, Venus very bright, Arcturus (where I saw the comet for the first time early last week), and the moon in its glorious first quarter. And of course the comet, very visible with the naked eye, its tail faint but long...A perfect night that I wanted to share with you and others here."

Frank Louwers (in Belgium)
E-mail: 72361.2161@compuserve.com

A small sampling

I have also received several messages from Joseph McSwain (e-mail: 74032.1616@compuserve .com), who often writes on his Palmtop while soaking in the bath tub. This is possibly the most hedonistic, dangerous, and unusual use of a Palmtop in our files.

Palmtops have been used on polar expeditions, by a number of private and commercial pilots, by a farmer on the back of his tractor plowing his fields, by a Marine colonel in the middle of the Kuwait desert during a readiness exercise following Desert Storm, by a physician who volunteers to fly into impoverished South American villages to provide medical service, by a participant in the 14K Prudhoe Bay Alaska Mid-Winter Fun Run, and more.

Keep the Palmtop in your pocket and keep using it wherever you are. And send in your experiences to my attention. (CompuServe users GO HPHAND, enter the Fireside section and send a message to Linda Worthington [74452,105. You can also e-mail your experiences to 74452,105@compuserve.com).

THE HAND-HELD SYSTEMS INTEGRATOR GUIDE

Detailed information about platforms, system integrators, vertical market solutions, and enabling technologies. It covers the full range of hand-held systems, including PDAs, PICs, palmtops and specialized hand-held devices.

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CDI@CDPUBS.COM
HTTP://WWW.CDPUBS.COM

Shareware/freeware mentioned in this article

BUDDY.ZIP — Utility that adds many useful features to the HP 100/200LX. Shareware, last available on the HP Palmtop Paper Best Tips 1996, ON DISK. or from CompuServe's HPHAND forum, Library 11.

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Topcard and Buddy Help Lost Palmtops Find Their Way Home

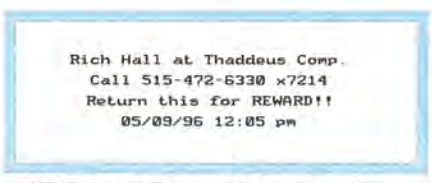
Your HP Palmtop is with you all the time, unless you accidentally leave it on a store counter, or in the airport lounge — then you're in trouble! Here are some ways to increase the chances that your lost Palmtop will find its way home.

By Victor Roberts

The HP Palmtop is easy to take with you, wherever you go. Slip it out of your pocket in a phone booth to check a number, calculate a percentage discount in a department store, and check on appointments while waiting in an airport lounge. Unfortunately, its size also makes it easy to leave behind if you're in a hurry, or if your attention shifts to other important matters.

Many users tape a business card to the bottom of their Palmtops, giving the person who finds your Palmtop a contact phone number. Some find the business card too thick and photocopy it onto a thin piece of paper or adhesive label first, and then attach that to the bottom of the Palmtop.

Other users place similar information in the Palmtop's Topcard screen. Press [CTRL]-[FILER] to go to the Palmtop's SET UP application and press [MENU] Options Owner to get the Owner Screen. You have a Name, Title, and Company line to enter information. Many users put their name on the first line and a message like, "If lost, please call 111-222-3456" on subsequent lines. Some even offer a reward if the Palmtop is returned.



HP Palmtop Topcard displaying "If lost, please call..." information.

You can also set up the Owner screen to display a .PCX file as the topcard. Window's Paintbrush application and other graphics programs can create images with text and save them as .PCX files in the C:_DAT directory. Then go into the Palmtop SET UP application and press [MENU] Options Owner. Press [ALT]- [P], select the .PCX file and press [F10]. Make sure the "Show Picture" box is checked in the Owner dialog box and press [F10] again. Finally, press [MENU] Quit to exit the SET UP application. Whenever all applications are closed, the .PCX file will display as the Palmtop's Topcard.

For more on the built-in topcard display, see "Topcard" in the index of *HP 100/200LX User's Guide*. See also Ed Keefe's article titled, Using Windows 3.1 Paintbrush Program to Create Topcard (PCX) Files, page 33 of the Sep/Oct 92 issue. Finally, check out TCSCAN.ZIP, a file containing some tips for creating topcard images for the 100/200LX. TCSCAN.ZIP also includes a dozen sample scanned images.

Problems with the Topcard approach

The main problem with this approach is that the Topcard is not always displayed. The person finding the Palmtop may press the ON button only to find the screen of an open application. He or she may not know how to close down the application, or even think it necessary to do so.

In addition, many 200LX users wisely enable password protection on their Palmtops. After it has been enabled, you cannot turn the 200LX on without entering a password of your choice. (See "Passwords, Setting" in the index of your *HP 200LX User's Guide* for more information on how to enable system-wide password protection.) System-wide password protection keeps

ABOUT THE AUTHOR

Victor Roberts is an Electrical Engineer with training in plasma physics. He does R&D on high performance discharge light sources and plays with computers in his spare time. Vic's Compuserve ID# is [70413,1423] and his Internet address is roberts@crd.ge.com.

your data safe, but makes the topcard (and any "if lost, call..." information) inaccessible. It won't display until after you enter the password. Fortunately, there's another approach to system-wide password protection available to 200LX and 100LX users — a shareware utility called Buddy.

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Buddy adds system-wide password protection

Buddy is a feature-rich utility for the HP 100LX and 200LX Palmtops (English-language displays only). It adds dozens of keystroke shortcuts and other options to the built-in applications, making it easier to use. A more complete list of Buddy features is found in the sidebar on page 44.

Buddy adds its own system-wide password protection option to the 100LX. This feature will also work on the 200LX, but the 200LX already has system-wide password protection built-in, making the Buddy feature redundant on that Palmtop.

The Buddy password protection feature has two advantages over the 200LX built-in password protection. First, the built-in feature on the 200LX cannot display the topcard until you enter the password. Second, Buddy's Owner Screen can display more information than the built-in Topcard. The disadvantage for 200LX users is that the Buddy password protection is not totally secure. For this reason, I think it's better for 200LX users to stick with the built-in password protection.

Once installed and activated on the Palmtop, the Buddy not only password protects your Palmtop, it can be configured to display an Owner Screen, displaying contact information and an "If lost, phone here..." message. Here's how it works.

Buddy displays an Owner Screen

Let's say the Buddy password feature is enabled on your 100/200LX and you lose your Palmtop. When a person finds the Palmtop and turns it on, the following message is displayed at the top of the screen:

```
PLEASE ENTER YOUR PASSWORD ('TAB' for info")
```

If the finder presses [Tab], Buddy displays a screen of information called the Owner Screen, written by you. You can put any information in this screen you wish to help the finder locate you and return your Palmtop. A sample Owner Screen is shown below:

```
This computer belongs to RICH HALL
If you find this computer, please call

        515-472-6330 ext 7214

REWARD IS OFFERED NO QUESTIONS ASKED
FOR THE RETURN OF THIS COMPUTER.
```

Press [TAB] when prompted for a password and the Buddy Owner Screen lets you display information to help the finder locate you and return your Palmtop. You can display more information on the Buddy Owner Screen than you can on the 200LX Topcard screen

What if the finder does not press TAB, and starts pressing other keys? After he presses [ENTER] four times, Buddy interprets that as four failed attempts to enter the correct password, and will go ahead and display the Owner Screen.

The Owner Screen is written by you using Memo (as described below), and can be easily changed. For example, when I take a trip, especially overseas, I will often modify my Owner Screen to show the local hotel where I am staying.

Setting up the Buddy Password and Owner Screen

Buddy is a shareware program and the unregistered version that you will find on various on-line services (and on *The HP Palmtop Paper ON DISK)* does not have the password feature. The first thing you have to do is get a registered version of the program. (See the documentation file that comes with Buddy for more information.)

Next, you need to have the Buddy password feature enabled. First go to Buddy setup application in AppManager. Then go to the "Global Preferences screen." Press the percent symbol (shifted [+]) and tab to the box labeled "Fn-F

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Password." Key in your password, press [F10] and press [F4] to quit the Buddy setup application. Once this is set, you can activate password protection at any time by pressing [Fn]-[F] instead of [OFF] to turn off your Palmtop.

An easier and more secure method is to set Buddy to automatically activate the password feature after a specified number of minutes off. Go back to the Global Preferences screen in Buddy and tab to and check the box labeled "Require PW if off (mins):". Tab one more time to the minutes box and specify a number of minutes (10 is default), then exit Buddy. Now whenever you leave your Palmtop off for 10 minutes, the Buddy system password feature activates. When you press [ON], you have to enter the password before you can go any further.

After setting up the password feature, you need to create the Buddy Owner Screen. Use Memo to create a file with the information you want. Put your name, any contact information you desire, an "If lost..." statement, offer a reward if you so desire. You can use the Bold or Underline attributes to emphasize important information. Limit yourself to 16 lines of text, as that is all that will be displayed. Save this file as BUDDY.OWN and place it in the same directory in which you keep BUDDY.ENV.

The default directory for BUDDY.ENV is C:_DAT, but you can specify another directory for BUDDY.ENV on the BUDDY command line in your AUTOEXEC .BAT file. For example, I keep all my Buddy files in A:\BIN and the line in AUTOEXEC.BAT that calls Buddy reads:

Buddy Owner Screen saves the day

Below are the experiences of a couple of Palmtop users who lost their Palmtops and got them back thanks to Buddy's Owner Screen.

Palmtop returned after stolen thanks to Buddy

By Mike Gaedeke, CompuServe ID: [100016,3476]

Recently, my car was broken into and my most valuable possession, my HP 200LX, was stolen. (Hint: don't ever leave your Palmtop in your car!) Thank God for — at least I had all my data and only needed to purchase a new Palmtop.

On the day following the theft, a lady called me at my office and in broken English mentioned that her husband had bought a small computer from a homeless guy in Downtown Los Angeles. The computer was not working, but my name appeared on the screen and it would not go away... Hoorrrayyy! I got my machine back!

This was only possible thanks to Jeffrey Mattox's BUDDY program, which has a feature that lets you make a customizable "topcard." I included my name and phone number on the topcard.

The topcard is linked to a password feature that I set to automatically enable after midnight. When you press the ON button, your are asked to enter the password. If you don't know it, the screen gets scrambled and you are "invited" to press the TAB Key for more info: that's when the topcard (which actually is a TXT file) appears. My topcard mentioned a $100 reward for anyone returning it within 24 hours... IT WORKED!

P.S.: Her husband had paid $70 for it. Can you believe it?

Buddy password protection gets his Palmtop back

By Steven E Spears, CompuServe ID: [71011,2243]

Thanks to Jeffrey Mattox and his BUDDY, I have my Pocket Brain back and in full working shape! I lost my 200LX on Saturday in the parking lot of a local Sam's Warehouse. After three weeks I had given up hope and had placed an order to ACE Technologies for a replacement. Before I could receive the replacement, a co-worker of mine answered my phone while I was out of the office and told me that someone was calling about my lost computer.

Unfortunately, no phone number was left and I was due to go to class in Orlando the next day, so I deputized everybody in the office to get the guys name and address so that when I came back I could contact him/her. Last Friday, after returning to town, I was able to go meet the guy.

"Tony," a mechanic at a nearby business to the Sam's Club, claimed to have purchased the 200LX from a stranger for $300.00! However, upon trying it out later, he realized that it must belong to me because he could not get past Buddy's password protection, which simply showed my name and phone number! I do wonder why a mechanic would be willing to pay $300.00 to a total stranger for a Palmtop that he never even turned on.

I sympathized with him about the problem but explained that he had bought "HOT" property and that I was willing to pay $100.00 as a finder's fee but no more than that! If he had not taken the offer, I was fully prepared to call the local police, but the $100.00 for something that he could not use was sufficient!

The batteries were still OK and I did not loose any files on the Palmtop, bit I did lose some blank checks (voided at the bank) and stamps that were in the carrying case.

Now I just have to get all of the data that I would have been entering over the past 4 weeks into the PC, and get used to having it with me! Anybody know of a good permanent attachment that does not depend upon body piercing? What I really want is for it to call me on the telephone when I forget it and tell me where I misplaced it!

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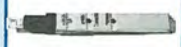

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a:\bin\buddy.com a:\bin\buddy.env

Every time I reboot, this line starts Buddy and specifies the location of the .ENV file.

Once you've created BUDDY .OWN in Memo and placed it in the correct directory, your system is ready to go. If someone finds your Palmtop and tries to turn it on, they'll get the PLEASE ENTER YOUR PASSWORD ('TAB' for info") message. When they press [TAB] the Owner Screen with the "If lost..." message is displayed.

There are two additional options associated with the Buddy password feature.

First, you can customize the "PLEASE ENTER YOUR PASSWORD ('TAB' for info)" message that appears when you turn on a protected Palmtop. Go the the Buddy Global Preferences screen, tab to the "Prompt" line of the Global Preferences screen and key in the message you like.

The second feature is the "Method" option, also found in Buddy's Global Preferences screen. The feature lets you select the background screen displayed when you try to turn on a password protected Palmtop. The three options are:

Scramble — which displays a scrambled pattern on the screen;

Topcard — which displays the Palmtop's build-in Topcard, not Buddy's Owner Card;

none — which lets the application open when you turned off the Palmtop show through.

If you choose the Topcard option, please read the Buddy manual, as having the Topcard open over other open applications can lead to some problems. Also, note that these options do not apply to Filer or the Palmtop's built-in Topcard feature. If either of those applications were open when the Palmtop turned off, they will be displayed with the Buddy password prompt, even if the Scramble option is checked.

Shareware/freeware mentioned in this article

BUDDY.ZIP — Buddy 2.1a is a feature-rich utility for the HP 100/200LX Palmtops (English-language displays only) that adds dozens of keystroke shortcuts and other options to the built-in applications, making it easier to use. Buddy's features include:

- ❑ Highlight data file in FILER and press [ENTER] twice to start the appropriate application and load the file.
- ❑ Double-click a letter or keypad key to obtain its shifted value, instead of having to hold down the Shift key.
- ❑ SmartCaps automatically and appropriately produces uppercase letters as you type text. (Capitalizes umlauts and accented characters and is not confused by abbreviations.)
- ❑ Adds many features to Memo, including change case, swap characters, repeat previous edit, mark current line, return to marked line, save find string, recall find string, and automatic indent.
- ❑ Adds user password logic that lets you specify that password be required whenever the power is turned on, or only if the machine has been off for longer than a specified period of time.
- ❑ Set up separate macro files for each application and automatically changes macro files when application started. Lets you run a specific macro automatically at startup.
- ❑ Provides visual warnings in Filer when battery usage timer or voltage sensor reach specified values.
- ❑ Displays your power source, main battery voltage, battery usage timer, and power-off timer values on the Filer display.
- ❑ WorldTime map overlay displays the day/night terminator plus any great circle route on the WorldTime map (registered copies only).
- ❑ Makes the CTRL and/or the ALT key "sticky," and changes the shift-lock function to work more like a standard typewriter.
- ❑ Adds 10 user-specified labels to your function keys so you can easily remember which key invokes which macro.

Version 2.1a is available on the *Best Tips 1996* issue of *The HP Palmtop Paper ON DISK*; CompuServe's HPHAND Forum, lib. 11. on Internet at eddie.mit.edu:/ pub/hp95lx/ NEW/100buddy.zip.

Registered versions are available for $40 directly from the author (add $5 for diskette). CONTACT: Jeffrey Mattox, The Buddy System, LCC, P.O. Box 45282, Madison, WI 53744-5282, USA; CompuServe ID: [71044,2356].

TCSCAN.ZIP — Freeware file that contains tips for creating Topcard images for the 100/200LX along with a dozen sample scanned images. Available on this issue of *The HP Palmtop Paper ON DISK*; CompuServe's HPHAND Forum, lib. 11.

Not a perfect solution, but it helps

This solution is not perfect. If the batteries run down, the Palmtop won't display any message. In addition, Buddy displays the Owner Screen on top of any of the built-in applications, including Topcard, but will not display it over DOS.

The solution: don't lose your machine when the batteries are low or when a DOS application is open. If you can't guarantee that, you might take the extra precaution of having a name plate with contact information put on your Palmtop, or taping a business card to the bottom.

Database Part II

123

This article discusses how to use 1-2-3 as a sophisticated database program that can produce reports with amounts calculated from database fields using criteria you specify. This article builds on the database techniques presented in the November/December 1995 issue

By Carl Merkle

The November/December 1995 issue reviewed some basics of how to use 1-2-3 as a sophisticated database program. Specifically, we created a sales database listing the sales person, customer, month, part number, quantity, unit price and totals (see screen graphic, this page). The reason 1-2-3's database capability is important is that the built-in DataBase program, while useful for capturing data and printing lists, does not provide the ability to create reports with calculated fields and calculated group subtotals. Thus 1-2-3 can be used to enhance the Palmtop's built-in DataBase program.

The November/December issue demonstrated how easy it is to create a 1-2-3 database and calculate group subtotals within a database using a subtotals formula that we created. We also developed an example showing how to link two database tables together using the @vlookup formula, thus obtaining capabilities similar to those found in "relational databases". The techniques employed, while useful, turn out not to be the most efficient and flexible way to create reports containing only results of the subtotals formulas.

In this issue we'll take the database linking and subtotals concept a step further and discuss how to create a database lookup table in 1-2-3 with tabulated results using 1-2-3's @DSUM formula. Then we'll discuss how to use 1-2-3's @vlookup formula to grab results from the lookup table for inclusion in a report section elsewhere in the spreadsheet. In this context we'll discuss an error trapping technique you may want to consider when using 1-2-3's lookup formula.

Introduction to 1-2-3's database summing formula

We'll use the 1-2-3 database spreadsheet displayed below as a starting place for this tutorial. This was created based on the instructions given on pages 54-56 of the November/December 1995 issue. (Note that there were errors in the spreadsheet displayed in that issue which have been corrected.)

```
17: (,0) [W12] @IF(D7=D8,0,@SUM($H$3..$H7)-@SUM($I$3..$I6))                READY

     A      B          C          D   E      F          G          H          I
4         Gary       Big Co       1 P01        75      1,000         75,000          0
5         Frank      XYZ Corp     1 P03        75      7,500        562,500          0
6         Gary       Alliance     1 P02        50      5,000        250,000          0
7         Sally      Standard     1 P02        50      5,000        250,000  1,137,500
8         Sally      Standard     2 P02        50      5,000        250,000          0
9         Sally      Summit       2 P03        25      7,500        187,500          0
10        Gary       Alliance     2 P02        75      5,000        375,000    812,500
11        Frank      XYZ Corp     3 P03       100      7,500        750,000          0
12        Sally      Standard     3 P03        75      7,500        562,500          0
13        Gary       Big Co       3 P01       200      1,000        200,000  1,512,500
14                                                                                  0
15                                                Totals       3,462,500  3,462,500
16
17
18        PART_PRICE_LIST
19        Part       UnitPrice
20        P01              1000
21        P02              5000
22        P03              7500
23
24-May-96  10:28 AM
```

Sales Database with monthly sales amounts calculated using subtotals formula (from November/December 1995 issue).

ABOUT THE AUTHOR

Carl Merkle is a senior manager with E&Y Kenneth Leventhal Real Estate Group, a business unit of Ernst & Young, LLP. He specializes in accounting, auditing and consulting regarding real estate and financial institutions. He lives in Irvine, California with his wife and three children. The HP Palmtop is a regular part of their daily activity.

This time we will use another approach to construct a subtotals by month formula. To do this, we'll use 1-2-3's @DSUM formula, a powerful "Database Statistical Function" that lets you add up amounts in a "field" (column) of a database only if certain "records" (rows) in the database meet certain criteria that you specify. The syntax for the formula is (on a single line):

```
@DSUM(Database_Range,
Field_Column_No,
Criterion_Range)
```

Below is an explanation of the above formula:

Database_Range — The range of our worksheet containing data. In our example above the database range is in cells B3 through I13. Notice that this range includes eight fields (columns B through I) and also includes the field names (Empl, Cust, Mo, etc.).

Field_Column_No — We want to be able to create subtotals of the data in the Sales field, which has a field column number of 6. (The first field in the Database Range is "Empl" and has a field column number of 0. The second, "Cust," has a field column number of 1, third, "Mo," has a field column number of 2, etc.).

Criterion_Range — This specifies where @DSUM will look for the selection criteria (i.e., which amounts in the "Sales" column 1-2-3 should add). The top row of a criterion range must contain one or more of the field names from the database. The second and subsequent rows of the criterion range hold the criteria themselves. For our example, we'll construct a criterion range in cells D16 through D17. We'll enter the label "Mo" in cell D16 and the number 1 in cell D17.

To complete this example enter the following formula in cell H17:

```
@DSUM(B3..I13,6,D16..D17)
```

This formula says the following: For the range of cells between B3 and I13, add up all the data in cells in the Sales field (field column number 6), but only include the data if the number associated with it in the Month column is 1 (i.e., sales figures from the first month).

The result of the formula should be $1,137,500. If the number 2 is entered into D17 the result should change to $812,500.

The only problem with using this method is that to create multiple subtotals you need multiple criterion ranges, each with a different month. These are a pain to create. However, there are at least two ways around this that I am aware of. One involves the use of the data table command. The other uses a macro to simulate the data table command. The data table method is presented in this article. A future article will cover the macro method.

Calculating multiple subtotals using the Data Table command

1-2-3's Data Table command lets you build a kind of "what-if" table in the worksheet. In this example, we want to vary the month and determine the sales subtotals (i.e., what if the month was 1, what if the month was 2, etc.). The first thing we'll do is to create a data table to vary the month number as an input into the @DSUM formula. In cell G18 enter 1, in G19 enter 2, and in G20 enter 3, in G21 enter 5.

We'll calculate the subtotals of each months sales using the Data Table feature as follows:

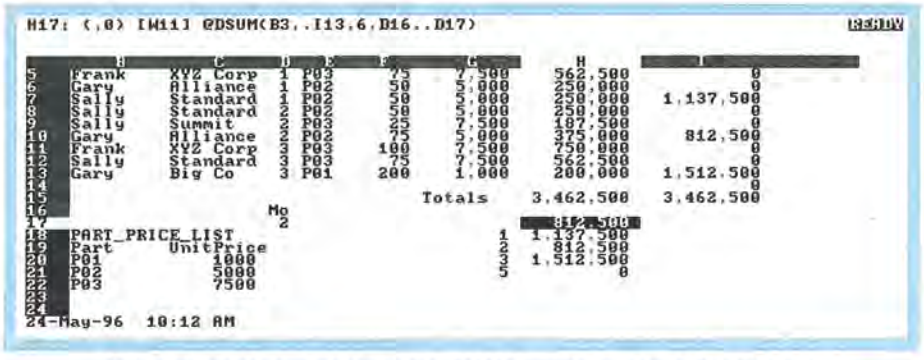
1. Press [MENU] Data Table 1. This command activates the Data Table function and tells it that you will have one variable in the formula.

2. Enter table range as **G17..H21** and press [ENTER]. This specifies the range of cells in which the data table and formula are found.

3. Enter input cell 1 as **D17** and press [ENTER]. This specifies the criteria needed by the @DSUM formula used in the data table.

Your results should be as shown at the bottom of this page.

The use of the Data Table command was discussed in the January/February 1996 issue. What it just did was replace the amount in D17 with each number in cells G18 through G21. As it changed each number, it calculated the result of the @DSUM formula in cell H17 and placed the result of each calculation in cells H18 through H21. As you can see 1-2-3 returned summary results in the table yielding answers that we expected (i.e., they match the monthly subtotals in column I of the Database Range).



Sales spreadsheet displaying subtotals in the bottom left, using the @DSUM formula in the data table (G17 through H21).

You can easily change the selection criteria upon which Sales are being subtotaled by changing the field name in the criterion range and the record labels in cells G18 through G21. For example, let's say you wanted to look at a sales subtotal for a particular part numbers.

1. Go to cell D16 and type in **Part**.

2. Enter **P01** in cell G18, **P02** in G19, **P03** in G20, and **P05** in G21.

3. Re-issue the Data Table command (points 1 to 3 above) or, simply press [F8] (TABLE).

Then, add a description for each part number in column I. (We'll use these later in custom reports.) Enter Monitors, Workstations, Servers and Disk Drives in cells I18, I19, I20 and I21, respectively. Your results should appear as shown at the bottom of this page.

Wrap up this portion of the tutorial by giving the sales subtotals lookup table (the range from G18 to I21) a short name like LTB as an abbreviation for Lookup Table. To do this issue the command [MENU] Range Name Create. When it prompts you to Enter Name: type **LTB** and hit [ENTER]. When it prompts you to Enter range: you can either highlight the cells in the range from G18 to I21 or type in **G18..I21** and hit [ENTER].

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Displaying the results in a report

If you use the @DSUM approach on larger databases and with longer lists, you may occasionally want to subtotal the subtotals, or have them rearranged in a way that is easer to read. For example, in my profession I frequently need to take a client's general ledger database and summarize all the amounts in it into key financial statement categories. I then present the subtotal categories in an easy-to-read financial statement.

To create worksheets with great reporting flexibility, I use three areas in my worksheets:

1. The database range (B3 through I13 in the above example),

2. The lookup table which serves as an intermediate calculation table (G18 through I21 in the example above),

3. A report range which looks up amounts and descriptions from the subtotals range using the @V-LOOKUP formula discussed in the November/December 1995 article.

(For instructional purposes this tutorial presents the database at the top of the worksheet with the report range at the bottom. However, a better habit is to have the report range at the top of the spreadsheet followed by the lookup table with the intermediate calculated results, which in turn is followed by the database at the bottom of the active spreadsheet area.)

The @vlookup feature lets you keep a constant value (like the unit price of an item), or a longer description of the item, or the subtotals like those just calculated in a separate part of the spreadsheet. You can then use the @VLOOKUP formula in a report located elsewhere to access amounts and descriptions from the Lookup Table. In the above example, I could use a @VLOOKUP formula to display the subtotals calculated with the Data Table command in another part of the spreadsheet. (In the above example we're working on, we will create a report range later at C24 through H32.)

	A	B	C	D	E	F	G	H	I	J
4	4	Gary	Big Co.	1	P01	75	1,000	75,000	0	
5	5	Frank	XYZ Corp	1	P03	75	7,500	562,500	0	
6	6	Gary	Alliance	1	P02	50	5,000	250,000	0	
7	7	Sally	Standard	1	P02	50	5,000	250,000	1,137,500	
8	8	Sally	Standard	2	P02	50	5,000	250,000	0	
9	9	Sally	Summit	2	P03	25	7,500	187,500	0	
10	10	Gary	Alliance	2	P02	75	5,000	375,000	812,500	
11	11	Frank	XYZ Corp	3	P03	100	7,500	750,000	0	
12	12	Sally	Standard	3	P03	75	7,500	562,500	0	
13	13	Gary	Big Co.	3	P01	200	1,000	200,000	1,512,500	
14	14									
15	15							3,462,500	3,462,500	
16	16			Part						
17	17			2				0		
18	18	PART_PRICE_LIST					P01	275,000	Monitors	
19	19	Part	UnitPrice				P02	1,125,000	Workstations	
20	20	P01	1,000				P03	2,062,500	Servers	
21	21	P02	5,000				P05	0	Disk Drives	
22	22	P03	7,500							
23	23									

Sales subtotals report based on Part Number instead of Month.

Undesired results with @VLOOKUP

When creating any report from results and data contained in a

lookup table you need to be very careful when using the @vlookup formula because a @vlookup formula has features which can produce undesired results. These undesired results are mainly produced in the report range when you ask 1-2-3 to lookup a number or text that does not exist in the index column of the lookup table. In the example we have been working on, we created the first data table which had month numbers. If we had tried to lookup the results for month 4 (which doesn't exist in the lookup table), we would have gotten an answer of 1,512,500. To understand how these undesired results can be produced, let's review again how the @vlookup formula works. The syntax of the @vlookup formula is (on a single line):

```
@vlookup(x,lookup_table_range,
column_offset)
```

@VLOOKUP compares the variable x above to each cell in the first (leftmost) column of the "lookup table range." This column is called the "index column." When 1-2-3 locates a cell in that column that contains x, it moves across that row the number of columns specified by the "column-offset" and returns the contents of that cell as the answer. If @VLOOKUP can't find a cell that contains x exactly, it will find and return the value closest to, but not larger than x. Thus the result 1-2-3 returns is located in the lookup table at the intersection of the row specified by x and the column specified by column_offset.

X can be either a value (number) or label (text). In addition, it can be the address or name of a cell that contains a value, label, or a formula that returns a value or text. If the index column of the lookup table contains values, then x must be values. If the index column of the lookup table contains text, then x must be text. If values are used in the index column, they must be in ascending order. If text is used in the index column they can be in any order. Entries in the index column of the lookup table should be unique - no duplicates.

For values, if x is smaller than the first value in a range, @VLOOKUP returns ERR (error). If x is larger than the last value in the index column of the lookup table, @LOOKUP stops at the last cell in the column specified by column-offset and returns the contents of that cell as the answer. If the value being looked up is not in the lookup table, 1-2-3 returns the results of the lesser of two lookup table index rows (i.e., if x is 24 and the index column of the lookup table contains 20 and 25 on adjacent rows, 1-2-3 will select the information on the row specified by the 20).

For text, if x does not exactly match the contents of a cell in the first column of range, @VLOOKUP returns ERR.

The problem I try to overcome when working with the @vlookup formula for report writing purposes is the fact that if x is a number, @vlookup can return a result even when x is not present in the index column of the lookup table. In addition, if x is text, @vlookup returns ERR when x is not present in the in the index column, and a number of ERRs in a report is confusing. To overcome this problem, I often use a conditional version of the lookup formula.

There are two forms of the conditional lookup formula — one for values and one for text. The conditional lookup formulas work as follows:

1. Conditional lookup with values
This @vlookup formula first tests to see if the value being looked up exists in the index column of the lookup table (a column-offset of 0). If the value exists, 1-2-3 is instructed to perform a lookup using the value and the appropriate column-offset. If the value does not exist in the index column of the lookup table 1-2-3 is instructed to return a zero.

2. Conditional lookup with text
This @vlookup formula first tests to see if the text being looked up will return an error (meaning the text is not in the index column of the lookup table). If it is an error, 1-2-3 is instructed to return a zero. If it is not an error 1-2-3 is instructed to perform the lookup.

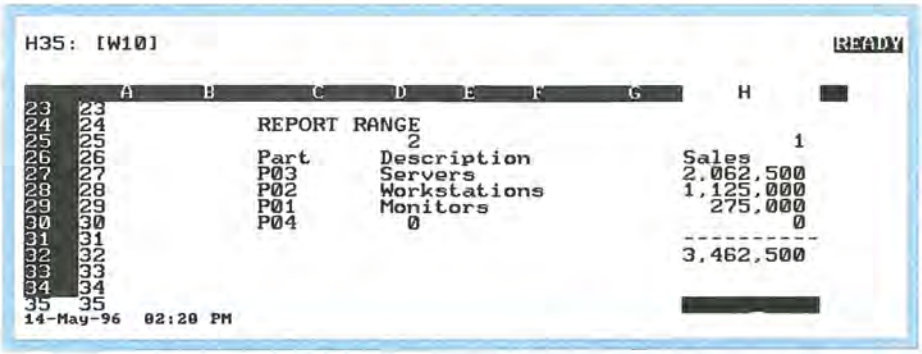
Composing a conditional lookup formula

Let's create a "report range" in C24 through H32 and compose a conditional lookup formula for that range. Key in the following labels and formulas in the report range:

Cell	Enter this
C24	REPORT RANGE
C26	Part
C27	P03
C28	P02
C29	P01
C30	P04
D26	Description
H26	Sales
H31	\-
H32	@SUM(H31..H26)
D25	2
H25	1

The entries in cells D25 and H25 will tell 1-2-3 which column in the lookup table contains data to be presented. The entries in cells C27 to C30 tell 1-2-3 which rows in the lookup table contain the data to be presented. Thus 1-2-3 has the appropriate column and row coordinates necessary to prepare a report. Because column or row coordinates can easily be changed in your report range, you can easily modify the report as you wish.

Since the the lookup table (G18 to I21) has label entries in the index column (i.e., P01, P02 etc are text rather than numbers) our report



Sales spreadsheet Report Range displaying sales figures based on part numbers.

range also uses labels in cells C27 through C30. Because labels are used the conditional lookup formula should test for errors. The following formula should be entered in cell H27 and copied down to H30. Also copy the formula in H27 to D27 through D30.

```
@IF(@ISERR(@VLOOKUP($C27,
$LTB,1)),0,@VLOOKUP($C27,
$LTB,H$25))
```

Your results should appear show at the top of this page.

Try experimenting on your own

You might want to try creating a monthly subtotals report based on the month number (value) instead of the part number (label). To do this, you'll first have to recalculate the subtotals of each months sales using the first Data Table example shown on page 48 of this article. Change the label in D16 from Part to Mo, change G18 through G21 to 1,2,3 and 5, and re-run the Data Table command as described on page 48.

Then in the REPORT RANGE you'll replace the "Part" (C26) with "Mo" and replace the part numbers with month numbers (C27 = 3, C28 = 2, C29 = 1, C30 = 4). Then change the text-based conditional formula in H27 to a value-based conditional lookup formula, and copy it down to H30 and across from D27 through D30.

```
H27: @IF($c27=@VLOOKUP
($C27,$LTB,0),@VLOOKUP
($C27,$LTB,H$25),0)
```

The results should look like the screen at the bottom of this page.

This formula first checks for the existence of the value being looked up (C27) in the index column of the lookup table (the range we named LTB) by checking for equality (i.e., is the value in C27 equal to value found in the index column). If this is true the next lookup formula is performed in which 1-2-3 is told the appropriate column-offset to use. If it is not true (i.e., the value in C27 does not match a value in the index column of the lookup table) 1-2-3 is instructed to return a zero.

Conclusion

I have found the techniques presented in this and the November/December 95 column to be valuable in my line of work in that they let me rapidly create useful analysis reports in 1-2-3 from databases. I usually obtain the databases in some other format and import them into 1-2-3. (A future article will be devoted to importing databases from other programs and exporting 1-2-3 data to other pro-

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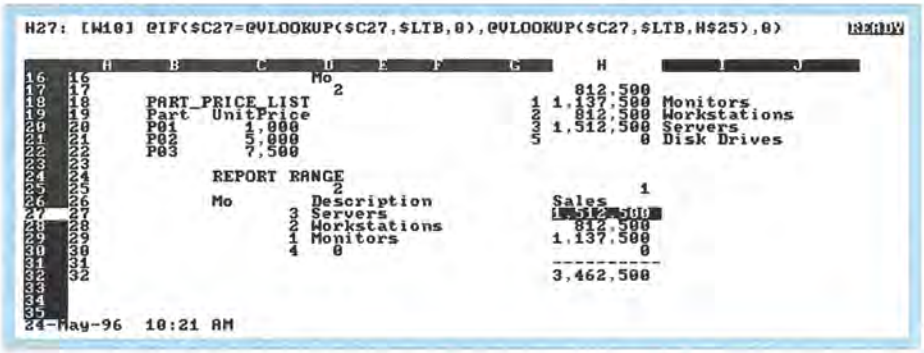

Report Range displaying subtotals report based on months instead of part numbers. "Mo" replaces "Part" in C26. Month numbers replace part numbers.

grams.) By experimenting with the techniques presented in this and the November/December 1995 column, you will find that your Palmtop PC can be used as a powerful front end reporting tool for databases that you others create in a traditional database program and import into 1-2-3. Unfortunately, since 1-2-3 is a memory hog and conducts all its work in RAM, the size of databases you can work with is limited both by available RAM and the 8,192 row limitation of 1-2-3.

In the next issue, we will explore a an extremely useful 1-2-3 add-in program called @BASE, which has recently been modified to run on the Palmtop. @BASE lets you work in 1-2-3 on huge databases that are in the dBase III format (most database programs can save their data files in this format). The size of database you can work on from within 1-2-3 using @BASE is limited only by the amount of space you have available on your flash card. Thus, with a 20 MB flash card, you could conceivably work with a monstrous dBase III file approaching 20 megabytes in size.

[123DB.WK1 is the completed spreadsheet example used in this article.]

Shareware/freeware mentioned in this article

123DB.WK1 — Lotus spreadsheet file displaying the use of the @DSUM and @VLOOKUP commands and creation of reports within a spreadsheet database. Available on this issue of The HP Palmtop Paper ON DISK or from CompuServe's HP HAND forum, Library 11.

Letters

(Continued from page 5.)

Finally, you can connect the Palmtop to an external floppy drive and copy files from the drive to the Palmtop.

All of these methods require a time investment to learn how to use the equipment and software, and an investment in money acquiring the equipment and service subscriptions. Unfortunately, there's no way around this investment — Rich Hall.]

Likes CD Infobase

I received my *HP Palmtop Paper's* CD Infobase yesterday. I would like to thank you guys for making such a useful CD. There must be countless hours of work put in it! Every bit of information is so easily accessible. I already started reading some early Palmtop Paper issues I missed before my subscription started. As for the developer's information, I couldn't be happier. Searching for any programming related topic is instantaneous with no need to open a big book anymore.

Thank you again for putting all the HP Palmtop information and programs that you have accumulated over the past four years on that CD. I'm very grateful to have it.

Harry Konstas
CompuServe ID: [72540,620]

He likes the Palmtop Paper as is

I just received Vol.5, No.1 of the Palmtop Paper. It was superb. As a marketing/communications person I must commend you on your restraint on making the magazine look too creative. The layout, typefaces, etc. is just right. I know that once in a while you receive letters from people who complain that your publication isn't technical enough for them. Please don't listen to them. I have learned more from my subscription to *The HP Palmtop Paper*, and acquired more confidence in using my Palmtop, than from all the other computer books and magazines I have ever purchased.

Holger Enge
Toronto, ON CANADA

He wants changes in the Palmtop Paper

I am a subscriber to your magazine, HP Palmtop. It has been useful for me, and I think it is well done. I like the technical articles by people like Ed Keefe. The snibbits of info are interesting, too.

There is an area where I feel the magazine falls short of my needs. This is in the area of product reviews. I would like to see reviews with PC Magazine kind of data and Consumer's Guide impartiality. Though David Shier did his best to be impartial in his article on fax/modem/mem cards, impartiality is a bit much to ask from a vendor, and such authorship does not have the appearance of impartiality. He provided useful facts, but I would like to know, for example, exactly how much current (ma) do these products use in various modes of operation. How about reliability figures, etc. How about a detailed matrix of features and pros and cons.

Regarding the other PCMCIA cards discussed, such figures and comparisons were also lacking. The PCMCIA cards "reviewed" often were products advertised in your magazine, to the exclusion of products not advertised. (That was my reaction; I'm not sure how accurate it is.) As a reader and end user, this pattern shakes my trust.

And, no, I do not feel a strong obligation to support advertisers, just because they advertise in *The HP Palmtop Paper*. It's a factor, but of higher priority are: cost, functionality, reliability, performance, and support.

As a friend put it,"I would like to see more articles of substance." He was referring to lack of hard data, and the repetition of several-page articles describing "What I do with my Palmtop." Maybe we're sounding like advanced users, but I wouldn't put myself in that class. I have no trouble finding uses for the Palmtop, but I do hunger for the kind of articles that move me closer to being an advanced user.

I also like articles that quantitatively compare like software packages. For example, language translators: Cost, mem required, speed, words, features, accuracy, ease of use, etc. Again, PC Magazine is a reasonable model.

Well, I'm still your customer. All I ask is that you

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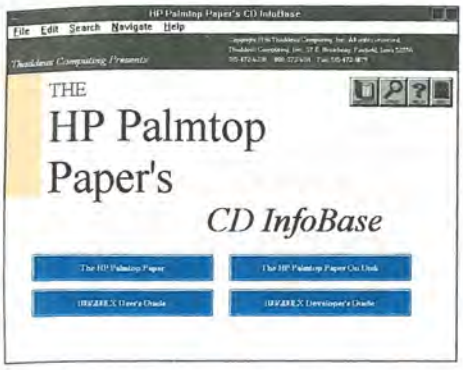

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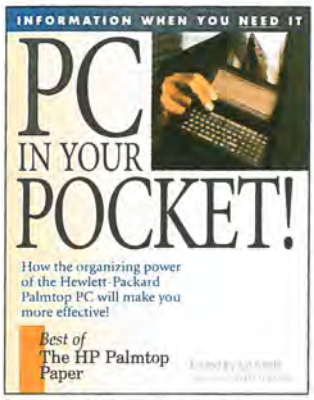
Thomas Rundel



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continued from page 8

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consider my needs along with all the others you need to consider.

Reed White
CompuServe ID: [73171,2140]

[Thanks for your thoughtful comments. To a significant extent I agree with them, but in practice I don't know what we will be able to do. We will continue Keefe articles.

In terms of the quantitative info you desire, we do not have the facilities or personnel to do PC Magazine like reports. They operate with 2-3 magnitudes more subscribers, capital, advertising revenue, and personnel. We depend on outside people to share their insights and contribute to our magazine. Instead of "objective" analysis, we try to ask ourselves the question: "What customer would find which product useful?" In terms of the EXP vs the Apex PC Card modems with flash memory, those more concerned with speed we recommended EXP, those more concerned with power consumption we recommended APEX. That really is the bottom line.

I don't exactly agree with you about what you are implying when you mentioned that "PCMCIA cards reviewed often were products advertised". In most cases it is those vendors interested enough in advertising that have the best, most useful, Palmtop-aware products. Other Vendors ignore the Palmtop and leave the Palmtop customer on his own. The reviews we did in PC Card Review included Silicom, AT&T, and HP Starlink, none of whom advertise, but competitors such as Motorola do — Hal Goldstein.]

Using the HP Palmtop for Diagnostics

I recently found another, unexpected use for the HP 100LX. Our firm was called upon last week to assist a client who had experienced a data communications failure between their main office and a branch office about 35 miles away. They have a centralized local-area-network connected to a remote office via multiplexers and a dedicated analog telephone line.

At first we were unable to diagnose the problem because we were unfamiliar with the multiplexers and communications setup. However, the documentation indicated we would connect to the multiplexer via an RS-232 command port. I had my HP 100LX and assorted cables so I connected it up.

Using terminal emulation I was able to run diagnostics on both units and found the problem. When a replacement multiplexer arrived I configured it with the HP 100LX attached to it, and had our client up and running (although not as quickly as we would have liked).

I found the HP 100LX to be excellent for the purpose. Before I left, I captured the diagnostic sessions to a disk file and added editing comments via Memo. Then I changed adapters and printed the documentation out for our client on their laser printer.

I have to admit, I have been using the 100LX for over a year now and it's the first portable/laptop/notebook that I have used for over 6 months since I got into the computer business fifteen years ago. I guess it's the size and functionality that attracts me. It simply does everything I need.

Morrie Verner
MicroAge Computer Center
CompuServe ID: [102335,1564]

Motel room surgery

Thought I would share this adventure with you guys and gals. When I go on the road and have the HP Palmtop and a PPI pocket modem. I also bring my "road warrior emergency kit" with some phone cable, alligator clips, tools, etc. It saved me from being cut off from CIS yesterday.

I tried to connect to CompuServe from a RJ-11 wall plug in a motel room in Gloucester, MA. I had no success. Suspecting a hardware problem on my 200LX, I tried again with my girlfriends 100LX. Same phenomenon: absolutely no data arriving from the modem to the HP Palmtop. So the problem was probably not the HP Palmtop. The modem's LEDs indicated that it was working, so I suspected the modem cable I purchased from Shier Systems..

Upon close examination, the PPI end of the cable could be turned freely and made a strange clicking sound. I used a sharp knife and pair of cutters from my kit to open the connector. Inside the cable I found two loose wires. I suspected that one of them was intentionally disconnected and used a Radio Shack multimeter from my kit to determine which wire was previously connected to the HP connector side. I also found the pin that it was connected to.

I used a make-shift soldering iron (alligator clip and lighter) to solder the wire back and was modem again. One of the first things I did was to contact Shier Systems via CIS. David Shier sent me a replacement cable at no cost.

Gilles Kohl
CompuServe ID:
[100114,3146]

Pricing and Contact Information for products mentioned in the letters to the editor

All prices are manufacturer's suggested retail price. It may be possible to purchase the product for less at third-party vendors.

APEX Data/Fax Modem & Memory — $varies (US)
Data/fax modem memory card with 2, 4, or 6MB of flash memory.
Contact: *Apex Data; Phone: 800-841-APEX or 510-416-5656; Fax: 510-416-0909.*

AA Batteries — $varies
Contact: *Electronics, camera, and discount stores.*

Harper Collins Dictionaries.
Electronic references that work on the HP Palmtop. May require a flash memory card.
Dictionary/Thesaurus — 49 £
Collins On-Line Bi-Lingual Language Dictionaries — 59 £
Collins Series 100 — 69 £ /
International contact: *Harper Collins Electronic Reference; 14 Steep Lane, Findon, Worthing, West Sussex BN14 OUF, UK; Phone: + 44-1903-873-555; Fax + 44-1903-873-633; E-mail: 100317,1372 @CompuServe.com*

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Disk with shareware/freeware mentioned in *The HP Palmtop Paper.*
Contact: See ad, page 8.

HP Palmtop Paper CD-ROM Infobase
CD-ROM with 1991-1995 issues of *HP Palmtop Paper*, shareware/freeware, *HP Palmtop Developers Guide*, Project Gutenberg e-texts and more.
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Custom cable that connects Palmtop to PPI. Other cables available.
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Appointment Book

Display month of Events in Appointment Book

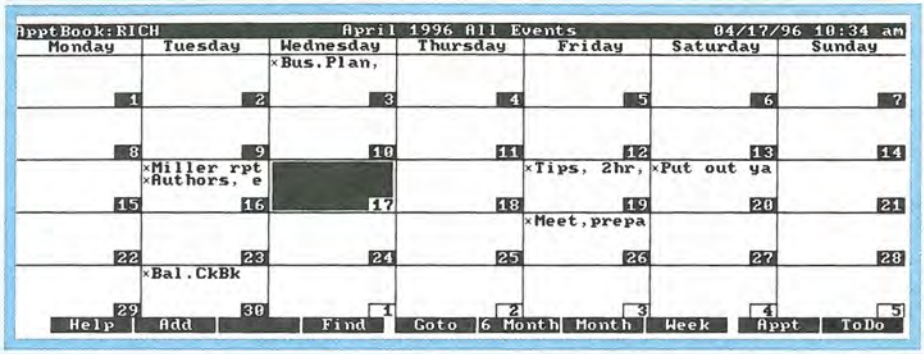
Events are appointments that are associated with a day only, not a specific time. Let's say you know that on a specific day you want to spend one hour working on a report. Unfortunately, your schedule is such that you cannot specify which hour you'll devote to the report. Set it up as an Event and it will appear at the top of your appointments list on that day. There is no alarm associated with an Event.

Some users enter personal goals or affirmations as Events and set them up to repeat daily, weekly, or monthly. They appear at the top of the screen whenever you open Appointment Book, reminding you of a personal or business goal you are working on.

To set up an Event, open Appointment Book and press [MENU] **A**dd **E**vent. The add Appointment/Event screen pops up with the word None appearing in the Start Time and End Time fields. Enter the Event description, Start Date and any other information you desire, and press [F10] (see screen below).

Users who enter numerous repeating events will sometimes uncheck the Week and Month views in the add Appointment/Event screen so Events only appear on the day they are scheduled. This keeps the Week and Month views of appointment book from getting cluttered with repeating events.

Whether you check or uncheck the Month view box, you can get a monthly view of Events only. Open Appointment Book and press [MENU] **V**iew All **E**vents. The Monthly All Events screen will look something like the screen shown above.



All Events monthly view. From Appointment Book press [MENU] **V**iew All **E**vents. Screen shows monthly view of Events only.

No appointments will be shown in this screen. Press [F9] to go back to the Daily view, [F8] for the Weekly view, or [F7] for the Monthly view of Appointment Book.

Note also that the Month view only shows the first 10 characters of the Event or appointment description. If you enter your event as "Need to work on the Smith account," the Month view displays it as "Need to wo." Not very informative! Better to enter it as "Smith Acct, work on." Then you see "Smith Acct," in the Month view. Still brief, but at least you know what the event is about.

Rich Hall
HP Palmtop Paper

Increment time fields

Not all of my appointments start on the hour, in fact most of them seem to start at odd times, so I have to adjust the start and end times in some way. An easy way to do this is by using the plus [+] and minus [-] keys. Let's use a simple example. Say I have a dentist appointment at 12:45 pm. There are a number of ways to enter this start time, for one I can type **12:45pm** in the start time field, but I always seem to make a mistake doing it this way and end up having to enter it one more time at least.

Another way is to go to the 1:00pm time slot in the Appointment Book and start typing **Dentist.** The appointment book will start a new appointment for you and you will be typing in the Description field. Press [ENTER] and the Appointment Book will go to the Start Time which has 1:00pm in it. If I press the minus [-] key, the time will decrease by 15 minutes and I will have the correct starting time for the dentist appointment. If I want to increment the time by one minute increments, I use the [SHIFT] and the plus [+] or minus [-] keys. This works on any Palmtop DataBase file that has a time field in it.

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Appointment Book's main screen showing Events appearing at the top of the screen with no specific time assigned.

Copy irregular repeating appointments to month view

Most repeating appointment situations are covered by the options available in the Repeat Options screen: Daily, Weekly, Monthly, Yearly and Custom. But what do you do if you have appointments that repeat at non-regular intervals (i.e., next Friday, a week from next

Tuesday, and three weeks from Saturday)? The best solution is to create the appointment once and copy it to the other dates.

1. Create the Appointment — At the Appointments screen, start typing the description of your appointment. It is automatically entered in the Description field of the Appointment/Event screen. Enter the Start Time and the Leadtime you want. Enable the alarm by pressing [ALT] **B** and select Weekly and Monthly views if you want by pressing [ALT] **W** and [ALT] **M** respectfully. When you are done, press [F10] (Done).

2. Copy the Appointment — At the All Appointments screen, highlight the appointment you want to copy and press [Fn]-[=] (Copy).

3. Go to the Month View — Press [F7] to go to the Month view. Use the Arrow-Keys to highlight the day you want the appointment to occur, then press [Fn]-[+] (Paste). The appointment is entered for that day.

Do this for all the days you want the appointment to occur — highlight the day for the appointment and press [Fn] [+] (Paste).

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Filer

User FILER's filter function to find a file

Sometimes it can be difficult finding a file that you want. An easy way to find files is to use the filter function in Filer.

Let's say you only want to look at the Lotus files on C:\ (i.e. those files with the .WK1 file extension). Go to FILER and make sure you are in C:\. (Press [ESC] until C:*.* is displayed in the top right corner of the screen. If you find yourself in the Available Drives screen, highlight **(-C-)** and press [ENTER].) Press [F4] (Filter), type in ***.wk1** and press [ENTER]. FILER will only show files with a .WK1 extension. You can create other filters to select files to be displayed. If you had entered *.doc, only MEMO document files would have been displayed. If you had entered p*.*, all files beginning with P would have been displayed.

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Memo

Make a mistake? Restore the last version

Like any human, I always make mistakes. For example, I will be editing a text file in MEMO and delete a whole bunch of text I didn't mean to delete. After all the expletives, I calm down and think about what to do. When I have made a mistake in MEMO like I mentioned above, all I have to do is press [MENU] **F**ile *1* and the last saved version of the file is returned. This lets me go back to work without having to re-enter all the work I did. This is another good reason to save your work by simply pressing [F10] Save every couple of minutes.

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Misc

Don't lose data: close all applications before backing up

As computer users, we all know that we should make back up copies of all our data and program files. Some of us back up religiously, others of us always seem to tempt fate, but we know that it must be done. There have been many tips and articles in *The HP Palmtop Paper* over the years on methods of backing up, and all work well, so please pick a method and stick to it for your own mental health!

No matter which method you choose, one fact remains true — make sure you have closed all applications before you backup. As a protection for your computer, MS DOS will not allow you to copy a file that is open, so no matter how good and thorough your backup scheme is, it will fail if you forget to do this.

A simple way to close all of the open applications is by pressing [&MORE...] [MENU] **A**pplication C**l**ose All. If you have any unsaved work in any of the open applications, the Palmtop will ask if you want to save changes and you can answer accordingly. When all the files and applications are closed, your Palmtop will be back at the Topcard screen.

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HELP!

In my opinion, the most important key to learn in any program or application is the Help key. In many instances, pressing the Help key will save you a lot of time and trouble by not having to stop what you are doing, find the manual for the program, remember what it is you need help with, look it up, read it and go back to the computer only to stare at it blankly wondering what it is you were doing.

For the built-in applications on the Palmtop the help key is [F1]. HP has built in a fairly comprehensive, location sensitive help function. In other words, if you are in 1-2-3 and are entering a formula such as @DATE and forget the format, press (F1) and the help will tell you how to enter it and what it does. In the case of the Lotus formula, **@DATE(year,month,day)** calculates a date number for year, month, and day. This can be just what you need to complete the task you are attempting.

When you need a little more help or need help overall with the application you are using, just press [F1] again, and see all of the help topics available. Then you can highlight the topic you want help with and press [ENTER] and view the help for that topic.

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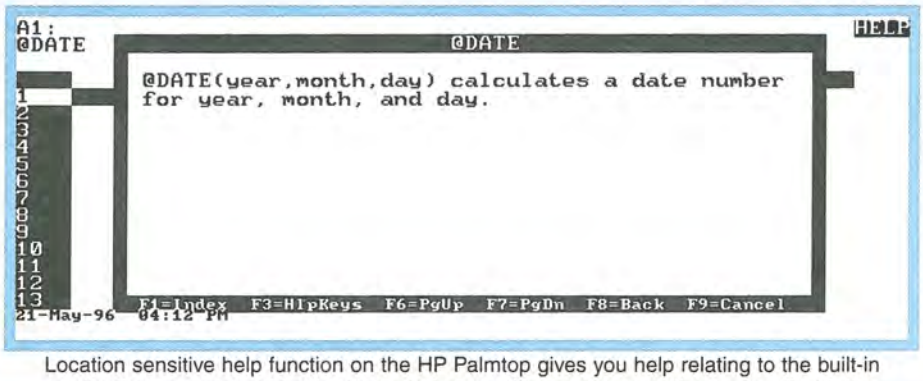


Location sensitive help function on the HP Palmtop gives you help relating to the built-in application you are working in. Above in Lotus, with the cursor resting on a cell with the @DATE function, press [F1] and you get a help screen on that function.

▲▲▲ QUICK TIPS ▲▲▲

Appointment Book

Customize the daily greeting

When you turn on the 200LX for the first time each day, you are greeted by the Appointment Book telling you of any appointments you have that day. If you have no new items, you get the message: "No new or due items today."

You can customize this message by modifying a file named APPTS.INI. Here's how you do it.

1. Edit APPTS.INI in Memo. Press [MEMO] [MENU] **F**ile **O**pen. Enter **D:_DAT\APPTS.INI** and press [ENTER]. You'll get a screen that looks like the one shown below.

You can now change/add to the greeting messages. When you are done editing the file, press [MENU] **F**ile **S**ave **C:_DAT\APPTS.INI** and press [ENTER]. Notice that you've saved the file in a different location: C:_DAT. The Palmtop looks to this directory first for the APPTS.INI file when you open it up the first time each day. If it doesn't find it in C:_DAT, it looks to the permanent copy in D:_DAT.

EMPTY DAY MESSAGE

Take a look again at the screen below showing APPTS.INI open in Memo. The first three lines of the file specify the message you get on a day with no new or due items. The COUNT=x line lets you specify how many different "no new items" messages there are, with the default file having only one. So, for example, you could add a second message by changing the second line to COUNT=2 and adding a fourth line as shown below (single line):

002=No appointments or todos. Check tomorrow.

You would add this line immediately below the third line and make sure there is an empty line between it and the [FORTUNECOOKIE] line.

MESSAGES OF THE DAY

The next section, beginning with [FORTUNECOOKIE], lets you specify the 'message of the day.' These are displayed when you first turn on the Palmtop each day and are selected randomly from a list of 85 entries. In the APPTS.INI file that comes with the Palmtop, these are tips about the Palmtop.

Once again, the COUNT=x line says how many there are. The default file comes with 85 messages. If you add a message to this section, you must up that count one. If you delete a message, you must take the count down one. Keep the numbering of the messages in order (i.e., if you add a message, put it at the end after 085 and number it 086, and make sure the count is changed to 86).

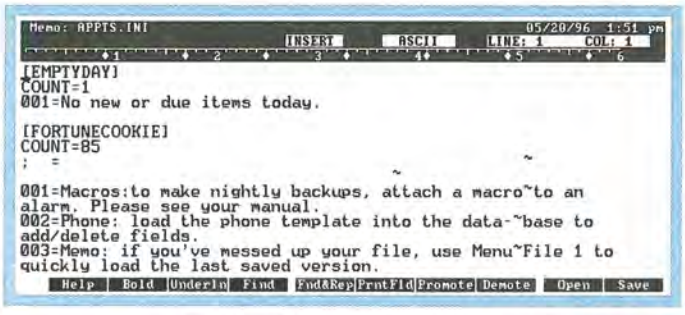
Below the first three lines of the [FORTUNECOOKIE] section are the actual messages, each in the format:

<3-digit item #>=<text>

The text can have an embedded tilde (~) to indicate a line break. When you look in the default APPTS.INI file D:_DAT\APPTS.INI you'll find that the third and fourth line, and the last two lines in the FORTUNE COOKIE section are "comment lines," beginning with the characters ; = and containing tildes showing where line breaks MUST occur. You can have one or two lines, and the lines can be shorter than the maximum of 46 characters allowed.

There are two utilities on the *1995/96 HP Palmtop Paper's Subscriber's PowerDisk* called GREET.COM and GREETIME.COM (in GREET100.EXE) that will force the greeting to occur at a time you specify. GREETIME.COM sets the time that is taken to mean a new day has started - i.e., after what time turning the Palmtop on triggers the greeting and GREET.COM displays the greeting. You only have to run GREETIME.COM once. The time will be set until you cold boot the machine and initialize the RAM disk or remove all batteries.

Steven Van Dyke
Compuserve ID: [70611,2147]



The APPTS.INI opening message file as displayed in Memo.

MS-DOS

Protect files with "Read Only" file attribute

One of the lesser-used DOS utilities that can be very useful is the ATTRIB command. Every file on any PC has one or more attributes, as follows:

R — Read-only file.
A — Archive file.
S — System file.
H — Hidden file.

Most files are given an A or archive attribute, which is used to mark files that have changed since they were previously backed up. A file that has an attribute of S or System file is one that DOS itself needs. There are none of these on the Palmtop. Hidden files are occasionally created by programs you install on your system. Some files are so vital to the operation of a program, that accidental deletion of the file could cause major problems with the program. When the program is installed on your computer, these files are hidden to protect it from accidental deletion.

READ-ONLY PROTECTS FILES

The last type of file attribute is R for Read-only. A file with this attribute can be loaded or run, but it cannot be modified or deleted. Some programs create this type of files during regular operation or installation. The file may be very important to the operation of the program and the developers decided to protect it from accidental deletion by giving it the R file attribute. The following Palmtop files are Read-only to prevent accidental deletion: C:_DAT\CCMAIL.ENV and C:_DAT\SETUP.ENV. There may be others.

DELETING READ-ONLY FILES

Files are created as Read-only to prevent you from accidentally deleting them. But you may have reason to delete or modify one of these files. For example, let's say you installed a software program on your Palmtop in a specific directory

and later decide to delete it to free up disk space. You use the DEL command from DOS or the built-in Filer to delete all the files in that directory and are able to erase all the regular files (i.e., the ones with the "Archive" attribute or no attributes). But DOS will flash the "access denied" message when you try to remove files with the Read-only attribute. You try to go to Filer and remove the file. Filer will also give you an Error message ("Cannot delete read-only file: 'filename'"). The way to delete a Read-only file is to change its file attribute.

Let's say you had a Read-only file named REPORT.TXT you wanted to remove. Go to the DOS prompt, change to the directory the file is in, type **attrib -r report.txt** and press ENTER. The file is no longer Read-only and can be deleted or modified. You can also make the REPORT.TXT file Read-only by typing **attrib +r report .txt**.

Many people create "templates" for Lotus worksheets or Memo documents. Once they get the template the way they want it, they can make it Read-only. They can load it, modify it and save it under a different name. They can't accidentally change the template itself.

The Palmtop's C:_DAT\SETUP.ENV file mentioned above keeps configuration settings for SetUp the application. Once you've set your Palmtop up the way you want it, create a back up of that file. If the original SETUP.ENV file corrupts or you make changes to it you don't like, you can restore the backup file to C:_DAT\SETUP.ENV. But first, you must turn off C:_DAT\SETUP.ENV's Read-only attribute so the file can be modified.

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HP CALC

Macro updates Currency Conversions

One of the great advantages of the HP Palmtops is the conversion feature of HP CALC. We can use it to convert length, area, volume, mass, temperature and currency, and this can be very helpful. All of the conversion applications are static (the relationship between grams and ounces remains the same), with the exception of currency (the relationship between dollars and Deutsche Marks seems to change second by second).

Keeping currency rates up-do-date can be a real chore. However, there is a way to automate this process with a macro that will automatically update the currency conversion feature (QOBLAS.MAC courtesy of H. Shrikumar, e-mail: shri@cs .umass.edu .)

The macro is updated with the most recent conversion rates each week and can be downloaded from the internet at (address on one line):

http://www.techbabble.com/guest/200lx.html

You simply go to that URL and enter your name and e-mail address in the appropriate box, choose Send. The file and instructions are sent to you via e:mail, or you can download the macro itself by clicking on the link.

When you get it, copy the macro to your Palmtop placing QOBLAS.MAC in the root of the C: drive (C:\). (If you are running Buddy, turn it off by pressing CTRL--).

Load QOBLAS.MAC into the System Macros application by pressing CTRL-&MORE... MENU **F**ile **O**pen, type in **C:\QOBLAS.MAC** and press F10 Done. Press MENU **Q**uit to close the System Macro application.

Run the macro by pressing FN-F1.

After the macro makes the changes to currency, it will try to chain itself to C:_DAT\DEFAULT.MAC. This is the name programmed into the macro for your original macro file. If it can't find that file, the macro will give you a beep. Press ESC and QOBLAS.MAC automatically removes itself, leaving your original macros loaded and in tact. (Make sure you have a copy of QOBLAS.MAC in another location if you want to keep it.)

The macro will change all of the currency conversion rates to the current ones. QOBLAS.MAC includes currency conversions for U.S. Dollars, India, European Currency Unit (ECU), Japan, Britain, France, Germany, Canada, Australia, China, Pakistan, Russia, Taiwan, Singapore, United Arab Emirates (U.A.E.), Hong Kong, Switzerland, Argentina, Czech Republic, Italy and the Netherlands.

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Lotus 1-2-3

Use Lotus as an Appointment Book

The Palmtop Appointment Book is a very good application, but sometimes there is a need for more flexibility. For example, you may have an event or series of events that are dependent upon another event that may not have a set date, like a rocket launch date. In the scheduling of rocket launches, all events are written in terms of launch date. It may be that a given analysis is due 30 days before the Launch Date, but the Launch Date may change at any time. This can make it a real nightmare to try do any planning/scheduling in either the Appointment Book or on a paper calendar.

The solution to the problem is to create a schedule in Lotus 1-2-3, using the built-in date arithmetic feature. Then, when you change the Launch Date, all other dates dependent on it will automatically recalculate. The concept will become clearer using the Launch Date example.

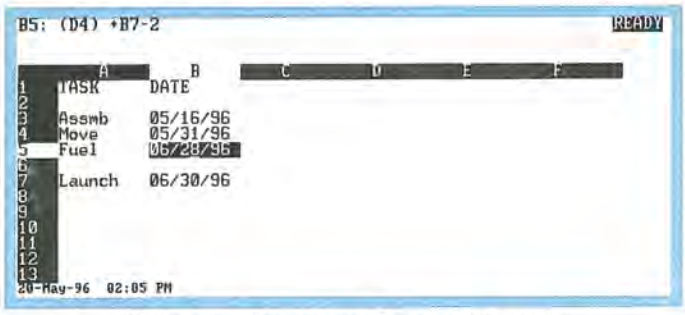
Suppose we are going to launch the U.S. Space Shuttle and have selected the Launch Date. There are three other events that depend upon this date: Assemble the vehicle (Assmb), Move the vehicle to the launch pad (Move); and Fuel the vehicle (Fuel).

Enter **TASK** in cell A1 and **DATE** in cell B1 as headers. Enter all of the event titles in column A, as shown in the screen below.

Now move the cursor to cell B2 and format this column for dates. Since I prefer the long international date format of **MM/DD/YY** we will use this format in this example. You can use any date format supported by 1-2-3.

Press MENU **R**ange **F**ormat **D**ate **4**(Long Intl) and using the DownArrow, highlight the area to be formatted, in this case B1 through B7, and press ENTER. Now we can enter the projected date for the launch of June 30, 1996 in B7 by typing **@date(96,6,30)** and press ENTER (the date format is always entered as **@date (year,month,day))**.

Next, assign a formula to our tasks that will assign them dates based upon the Launch date. Let's suppose that Assmb needs to be completed 45 days before launch



Setting up Appointment Book rocket launch schedule in Lotus 1-2-3. Formulas in cells B3-B7 adjust date as Launch date changes.

date, Move 30 days before launch and Fuel 2 days before launch. Go to cell B3 and press **+B7-45** and press [ENTER], the date 05/16/96 shows up next to Assmb as our completion date. Go to cell B4 and enter **+B7-30** and press [ENTER]. Finally go to cell B5 and enter **+B7-2** and press [ENTER]. Now we have all of our tasks with their completion dates dependent upon the launch date. Now save the file by pressing [MENU] **F**ile **S**ave and name it **Launch** and press [ENTER].

When the launch date changes, all you have to do is open the spreadsheet and edit the launch date, and all of the other dates will change in accordance.

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Misc.

Zippy Backup

There are many ways to lose data with a computer, but only one way to ensure you can recover from the loss — make good backups regularly. I use ZIP = to backup my 100LX.

First, I set up ZIP to run in Server mode on the 100LX. I do this with the following entry in Application Manager:

Name: &ZIP

Path: a:\bin\zip.com /v

(you will have to modify the path for your machine.)

Comments: upside down ! (Fn-!) upside down ? (Fn-?)

(The upside down ! shuts down System Manager to prevent it from interfering with the serial port while ZIP is running.)

I connect my Palmtop to my notebook computer using the HP Connectivity Cable. Then I run the following BAT file on my notebook computer, which is where I archive the data from my 100LX. (Lines wrapped *to fit the four-column format. Enter each on a single line with no extra carriage return between lines.)*

```
c:\zip\zip a:\_dat\*.* /ft[c:\
hp100bak\dat]

c:\zip\zip a:\archive\*.* /ft[c:\
hp100bak\archive]

c:\zip\zip a:\is\*.* /ft[c:\
hp100bak\is]

c:\zip\zip a:\123\*.* /ft[c:\
hp100bak\123]

c:\zip\zip c:\*.* /ft[c:\
hp100bak\c]

c:\zip\zip c:\_dat\*.* /ft[c:\
hp100bak\c\_dat]

c:\zip\zip /u
```

As you can see, I have ZIP in the C:\ZIP directory on my notebook. I then go to each directory on the 100LX where I keep data and copy over new or changed files to a mirror directory on my laptop. The last line unloads ZIP from the Palmtop.

You also need to ensure that the clock on your Palmtop is synchronized to the clock on your PC, or else ZIP will not run.

Victor Roberts
Compuserve ID:[70413,1423]

Shareware/ freeware mentioned in this section

GREET100.EXE — Force daily greeting to occur at time you determine. Last available on the 1994-95 Subscriber's Power disk. Available from CompuServe's HPHAND forum, Lib. 11.

QOBLAS — Macro file that updates HP Calc currencies. Available this issue of The HP Palmtop Paper ON DISK. Online: http://www.techbabble.com/guest/200lx.html; CompuServe: HPHand Forum, Lib.11.

Product Index

Starting this issue, price and contact information for commercial products mentioned in the articles will come at the end of the article in which the product is mentioned. The exception to this will be the HP Products index, which will continue to appear at the end of *The HP Palmtop Paper.*

HP Products contact information: Authorized HP computer dealers worldwide (i.e. the same place you can purchase an HP LaserJet). To locate an authorized dealer in the USA, call 800-443-1254. You can also purchase the 95LX & 100/200LX and its accessories from ***ACE Technologies*** at 800-825-9977 or 408-734-0100; Fax: 408-734-3344; ***EduCALC*** at 800-677-7001; Fax: 714-582-1445. ***Global Connections*** at 800-709-9494 or 608-752-1537; Fax: 608-752-9548.

HP OmniGo 100 Products

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HP Palmtop Products

HP 200LX 2MB (HP F1061A) — **$679**
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Service Agreements (100/200LX, 2-year extension) — **$85**
For U.S. HP Palmtop users. Units must be under warranty to extend. Contact: *HP, Corvallis Service Center, USA; Phone: 503-757-2002.*

NOTE: Prices listed are suggested retail price. Dealer prices may vary.

HOW TO CONTACT US

[Please note: The HP Palmtop Paper does not and cannot provide technical support.]

There are a number of ways to get in touch with *The HP Palmtop Paper* staff. You can write, mail us a disk with your comments, send CompuServe or Internet e-mail, fax, or call. Our mailing address and contact information is:

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Phone: 515-472-6330
or 800-373-6114
Fax #:515-472-1879
Internet: letters@thaddeus.com

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❑ FREE AUTOMATED SUPPORT — offered 24 hours a day, seven days a week. Phone: 800-443-1254. (No operator is available.)

On-Line Support—offered by these bulletin board services.

❑ COMPUSERVE: GO HPHAND FORUM - Call 800-848-8199 or 614-457-0802: For FREE membership state #231.

❑ AMERICA ON LINE: Keyword PALMTOP - Call 800-827-6364 or 703-893-6288 for membership information.

❑ INTERNET: comp.sys.palmtops; or comp.sys.handhelds

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Shareware and Freeware Index (May/June 1996)
Software on The HP Palmtop Paper ON DISK or CompuServe

PRODUCT	FUNCTION	CIS FORUM / LIBRARY	TYPE	PAGE
ADVERT.ZIP	Text: Descriptions of products advertised in this issue.	NA	NA	NA
123DB.WK1	Lotus: Worksheet for spreadsheet database article.	HPHAND,11	Free	52
CHORD.ZIP	Database: A .GDB file containing guitar chords.	HPHAND,11	Free	9
ECGVU.ZIP	(In HPECHO.ZIP below) Reference for 12-lead ECGs.	HPHAND,11	Free	9
FLEXPAD.ZIP	Application: Text editor with capability for searches.	HPHAND, 11	Share	9
HPECHO.ZIP	Demo: Displays 18-images of an echocardiogram.	HPHAND,11	Free	9
LIBDB.ZIP	Contains list of files found in HPHAND.	HPHAND,1	Free	28
LX-DIAL.ZIP	Applications: Tone dialer for the HP Palmtop.	HPHAND,11	Free	9
PTP27.ZIP	Text: The HP Palmtop Paper, May/Jun 96.	NA	NA	NA
PTPDSK27.ZIP	Database: PTP OnDisk Index in .GDB format.	NA	NA	NA
QOBLAS.MAC	Macro file that updates HP Calc currency rates.	HPHAND,11	Free	58
QFAX.ZIP	Application: Fax software for the Palmtop.	HPHAND,9	Share	9
QVCOM.ZIP	Transfer graphics from Casio Digital Camera to Palmtop.	HPHAND,9	Free	10
README.ZIP	Text: Cover letter to the HP Palmtop Paper OnDisk.	NA	NA	NA
SNGDEV.ANN	Text: New CompuServe software distribution service.	HPHAND, 15	Free	9
TCSCAN.ZIP	Text: Tips for creating topcard images/sample images.	HPHAND,11	Free	42
UNZIP.EXE	Utility: Decompress .ZIP files	HPHAND,1	Free	Na

Internet Software (See Internet article, pages 12-23, for Internet addresses for these files.)

COMMO.ZIP	Small, robust comm program with VT102 emulator.	HPHAND,9	Share	14
DOSLYNX.ZIP	DOS-based Web browser.	Internet New Users/ CIS Dial PPP PCs	Free	18
ETHERPPP	(In INETDOS.EXE) Used with other programs to establish PPP connection.		Free	14
HV.ZIP	Lets you read HTML documents on the Palmtop.	HPHAND,11	Free	18
INETDOS.EXE	Package with Minuet, EtherPPP, MYIP and more.	Internet New Users using Web	Free	20,22
KERM2.ZIP	Comm program that supports VT102 emulation.	HPHAND,9	Free	14
MINUET	(In INETDOS.EXE) Suite combining common Internet applications.		Free	20
MPACK15D.ZIP	Code/decode files in MIME format.	HPHAND,11	Free	21
MYIP	(In INETDOS.EXE) Sets up TCP/IP address for other Internet programs.		Free	16
N103-PT.ZIP	Net-Tamer suite, common Internet applications.	HPHAND,9	Share	20
PNRV10.ZIP	Palmtop News Reader, offline newsgroup reader.	HPHAND,11	Free	19
QUALX13.ZIP	Lets you use cc:mail to access Unix mail system.	HPHAND,9	Free	18
SLIPARC.ZIP	Use to establish SLIP connection with ISP.	Internet New Users, CIS Dial PPP PCs	Free	14
SUUD10.ZIP	Unix-to-Unix encoding and decoding.	Internet New Users, Usenet	Free	21
TNR105.ZIP	Tiny News Reader, offline newsgroup reader.	HPHAND,11	Free	19
USENETAC.ZIP	Add-on lets acCIS users read newsgroups/ CIS Forums.	HPHAND,12	Free	20

Software mentioned and included in past issues of The HP Palmtop Paper ON DISK Subscriber's PowerDisk, or CompuServe's HPHAND Forum

200LX.ANN, (Nov/Dec 94) Text: Original 200LX announcement (HPHAND Lib.1) Free, 25; BAT100.ZIP , (Best Tips 96) Utility: Reports status of Palmtop batteries (HPHAND Lib.11) Free, 25; BATSET.ZIP, (Best Tips 96) Utility: Reset battery charge time (HPHAND Lib.10) Free, 35,38; BUDDY.ZIP, (Best Tips 96) Utility: Adds useful features to HP Palmtop (HPHAND) Shareware, 28,38,43; GREET110.EXE (95/96 PowerDisk) Utility: Contains GREET.COM and GREETIME.COM, two programs that let you set the time for the daily greeting and force it to appear. (HPHAND Lib.11) Free, 75; MAGDEM.ZIP, (Nov/Dec 94) Demo: Shows ACE's Magnify program (HPHAND Lib. 14) Demo free, 25; PK204G.EXE, (94/95 PowerDisk) Utility: File compression/archive (HPHAND Lib.1) Free, 28. VDE.ZIP, (Nov/Dec 95) Application: DOS word processor (HPHAND Lib.7) Shareware, 36; ZIP.ZIP, (Best Tips 96) Application: File transfer program (HPHAND Lib.7) free, 10. *(All 1991-1995 software contained on the HP Palmtop Paper CD InfoBase.)*

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